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The McGILL NEWS

Volume 11 DECEMBER • 1929 Number 1

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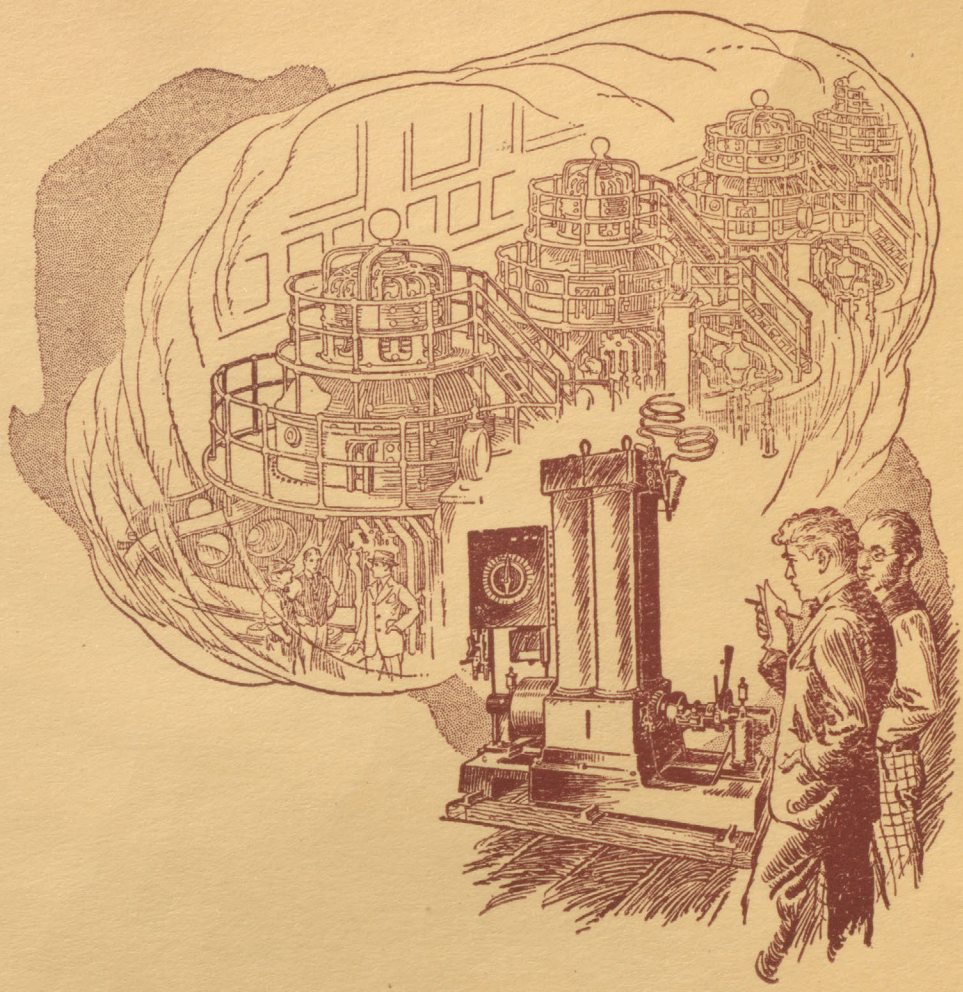
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THE McGILL NEWS

OFFICIAL PUBLICATION *of the* GRADUATES' SOCIETY OF McGILL UNIVERSITY

VOL. XI DECEMBER, 1929 No. 1

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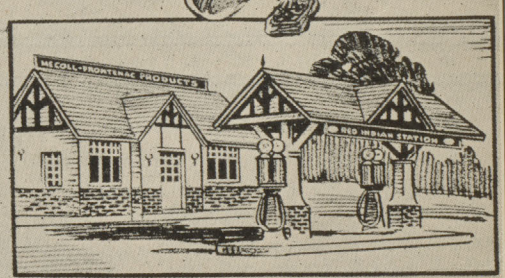
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AFTER THE DEGREE WAS CONFFRRED

The Chancellor, the British Prime Minister, and Sir Arthur Currie on the Steps of the Arts Building

Photo by courtesy of The Montreal Star

James Ramsay MacDonald, LL.D.

AT a special convocation held in Moyse Hall on the afternoon of Monday, October 21st, the University conferred upon the Right Honourable James Ramsay MacDonald, Prime Minister of the United Kingdom of Great Britain and Northern Ireland, the honorary degree of LL.D.

The event was notable as the first occasion in the history of McGill on which a British prime minister had received a degree while holding office; and the scenes attending the granting of the honour made the occasion memorable to all who witnessed them.

Mr. MacDonald came to McGill immediately upon the conclusion of a luncheon in the Windsor Hotel, tendered to him by the Canadian Club of Montreal, under the presidency of J. C. Kemp (Sci. '08); and the student body of the University accorded him a joyous welcome. From Sir Arthur Currie's home on MacTavish Street, the carriage in which he sat with the Chancellor,

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Mr. E. W. Beatty, was drawn by a group of students, wearing McGill's traditional red, down to Sherbrooke Street and into the grounds of the University by way of the Roddick Memorial gates.

Once upon McGill's own ground and in the shadow of her old grey walls, enthusiasm rose to a high pitch, and the Prime Minister, as his carriage progressed deviatingly to the Arts Building, was greeted with cheering, comparable in volume to that which, in other days, used to announce to the world outside the gates that again, on the sod of the old campus, a championship had fallen to McGill.

And there can be no doubt that the warmth of the welcome and the fervour of the demonstration in his honour touched the visitor's heart. For a few minutes the personality of the Right Honourable James Ramsay MacDonald, Prime Minister, became submerged in that of Ramsay MacDonald, the man, who, with no loss of dignity, but with his silk hat at an angle just a shade more jaunty than on strictly formal occasions, acknowledged smilingly the cheers that swept upon him from all sides.

It is possible that in the ranks of those who welcomed the Prime Minister so heartily were some to whom his political opinions were not acceptable. It must have been so; for McGill includes amongst her staff and students men of all political leanings. It is safe, however, to state that all present were moved sincerely by realization of the vision which had brought Mr. MacDonald across the sea to confer with the President of the United States, in order that the cause of international peace might benefit. And there was, too, appreciation of the Premier's courtesy in that, after sojourning south of the border, he had directed his steps to Canada, where, as a citizen of the British Empire and as the first in position amongst the subjects of the King, he might legitimately count himself at home.

At 2.50 p.m. the carriage, with its attendant snake-dancing procession, reached the steps of the Arts Building, and Sir Arthur Currie appeared at the door to bid the guest of honour a formal welcome. The *McGill Daily* states that at 2.57½ p.m. "a number of students were ejected from Moyse Hall in a most kindly manner." It may be that this is true; if so, it had no ill effect on the good humour of the assembly, for a moment or two later all joined in the singing of *Hail, Alma Mater*, the strains of which came through loud-speakers from the body of the Hall.

In the theatre, after the opening prayer by the Rev. Dr. G. Abbott-Smith, Dean of the Co-operating Theological Colleges affiliated with McGill, Sir Arthur Currie in a brief speech presented Mr. MacDonald to the Chancellor, who, with the traditional formula in Latin, conferred the degree. The Assistant Registrar, T. M. Matthews, then placed the hood of the degree over the Prime Minister's shoulders and James Ramsay MacDonald, LL.D. (McGill), stood forth to express to the gathering his appreciation of the honour paid him, his words evoking from outside first a cheer, as the loud-speakers carried them to the student body, and then the tribute of serious and attentive silence.

Following the Premier's speech, P. F. Foran, President of the McGill Debating Society, invited Mr. MacDonald to accept honorary membership in the Society, which was celebrating a half-century of active existence. Mr. MacDonald, the first honorary member to be appointed, accepted Mr. Foran's invitation, and, addressing the students, urged that study be not permitted to crush imagination, but that imagination be developed and wisely directed to the betterment of life as each one must find and live it.

Shortly after half-past three, the singing of *God Save the King* and pronouncement of the Benediction brought to a close a ceremony memorable in the University's history. The *McGill Daily's* chronology of events states that at 3.41 p.m. exactly, the Prime Minister left the University grounds; not, however, before a mighty McGill yell informed him again of student approbation and invited him, when opportunity should offer, to return.

* * *

Vancouver Notes

The McGill Women's Society of Vancouver held its annual meeting at the home of Mrs. A. H. Sovereign (Ellen Allison, Arts '11) on Monday, October 14th, and elected for 1929-'30: *President:* Mrs. Allan Parlow (Grace Ryan, Arts '14); *Vice-President:* Mrs. John Soutkin (Blanche Balkwill, Arts '13); *Secretary:* Miss Hazel McLeod, Arts '13; *Treasurer:* Miss Mabel McKeen; *Executive:* Mrs. Neville Smith (Margaret McWhinney, Arts '10); Mrs. John Wickson (Gladys Rogers, Arts '14); and Mrs. E. A. B. Kirkpatrick (Gladys Greggs, Arts '12).

McGill, Toronto, and Queen's Graduates in Vancouver held their Second Annual Ball on October 22nd in the Hotel Vancouver. Mrs. C. F. Covernton acted as patroness for McGill. During supper old College songs were sung, following the precedent set by the McGill Graduates at their annual dance.

Mrs. Clarence Ryan (Evelyn Lipsett, Arts '16) and Dr. Ryan have moved to Portland, Oregon.

Miss L. G. McKay, a graduate of the McGill Library School, is librarian at the Templeton Junior High School.

Miss L. Hull, graduate of the McGill School of Physical Education, is in charge of gymnasium work for girls at the Point Grey Junior High School, Vancouver.

A number of McGill graduates in Vancouver have sons and daughters attending the University of British Columbia. Among these are Mr. and Mrs.Neville Smith, two sons; Mrs. Jack, a son and a daughter; Mr. and Mrs. G. S. Raphael, a son; Dr. C. F. Covernton, a daughter; Mrs.Cumming and the late Dr. Alison Cumming, a daughter.

Dr. Darsell L. Hannington, formerly of Kimberley, B.C., is now living in Vancouver.

The Chancellor's Visit to the West

By C. F. MARTIN

IT is always a source of pleasure to graduates far from their Alma Mater to be visited by their colleagues at home, for such visits afford opportunity to renew cherished associations and to make manifest that loyalty to McGill and that enthusiasm for her achievements and ideals which every grateful graduate genuinely feels.

And so it was a happy and generous decision of Chancellor Beatty to take advantage of the Western Tour of Inspection of the Canadian Pacific Railway Directors to meet McGill graduates whenever opportunity offered.

It is gratifying to report that reunions were held in four of the larger centres, and that in smaller places groups met for brief, but worth while, conferences.

Included in the personnel of the tour were the Chancellors of four Universities—Queen's, Western Ontario, Bishop's College, and McGill, thus giving to the visit an academic importance that was unique.

It may be said, in parenthesis, that trips such as this, with their national economic significance, are always heralded in advance, so that not only is the party formally met at all stations by officials, but also by friends of the members of the party and by business, professional, and personal acquaintances. In consequence, at most halting places, one or more graduates of McGill were present to meet the party to express their appreciation of the visit of McGill's officials, and their pride and interest in the affairs of the University.

It is not easy to detail the many pleasant events of the tour, nor to discriminate with respect to the importance and interest of things seen and people met, but some effort will be made to mention personnel and places where McGill is specially concerned.

At Chapleau, one of the first sectional points *en route*, we were greeted by Dr. Sheahan (Med. '06), who is in charge of the C.P.R. Service locally, surgeon to the excellent hospital of the district, and who has maintained through the years a high standard worthy of the School. Crowe (Med. '07), whom we met at Schreiber, still preserves supreme influence medically over the clientele of that district.

A longer sojourn at Sudbury and in the adjacent International Nickel plant, enabled us to meet more graduates of McGill—Oliver Hall (Sci. '03), Superintendent of Works at the Frood Mine, who, in company with the American President, conducted the party and expressed lively interest in, and enthusiasm for, what McGill was doing and promising to do in the Department of Mining Engineering.

J. F. Robertson (Sc. '03), Sharpe (Sc. '07), Cooper (Sc. '15), and Tatley (Sc. '27) are also on the staff, with Montgomery (Sc. '08), Fortier (Sc. '11), and Oughtred (Arts '11) at Kimberley. It was here that Corless (Sc. '02, LL.D. 1921) made a reputation as one of the outstanding authorities in Mining Engineering and has thus personally added greatly to the prestige of his University.

This plant, controlling the world's output of nickel and representing an industry of the first magnitude, suggests the value to our Science Faculty of developing graduates skilled in Geology and Mining, and of the great benefits that will accrue to the University when more graduate study is made possible.

Nipigon Camp, established under the pleasantest auspices by the C.P.R., is largely run by University students, and the one McGill graduate there seemed happy among the Toronto youths and girls who formed the staff and the orchestral corps of the camp.

At the divisional point, Fort William, there was but half-an-hour's stay—happily long enough for our Chancellor to address a large assembly, seeking words of wisdom on matters of economic and national importance. Trips of this kind, a pleasure to most of the party, are no sinecure to the President of the line, to whom the purposes of such a jaunt are restricted to the recognition of achievement for the country through the ever-increasing invasion of lines of steel.

Crossing the plains to Winnipeg gives evidence on every side of the rapid development which this country is making. Brandon, a thriving city, forward in business and charming as a place of residence, is one example of the progress which this great country has achieved, and of the immense opportunities, even in the smaller towns, for graduates of our University. The stay in Winnipeg was to be short, as indicated in the printed booklet of our itinerary, but on the homeward trip a longer sojourn had been arranged. However, the official dinner by the City gave some opportunity of hearing of progress in the Middle-West. Sitting at the side of President McLean, of the University of Manitoba, it was pleasant to hear of his appreciation of McGill and of the mutual co-operation which he felt existed in every way between the two Universities. The short time at our disposal on the following day permitted only a few visits, including an inspection of the excellent Medical Arts Building—well-organized, equipped, and populated,—and, incidentally, a paying co-operative proposition for the original Medical Syndicate. The British Medical Association, which meets in Winnipeg in August, 1930, under the Presidency of Dr. Harvey Smith (Med.

'92), will find an organization, under his leadership, which augurs well for a most successful meeting. The newly-erected Winter and Badminton Clubs will house the Congress and will provide accommodation equal to the best.

Passing on to Regina, the stay was long enough to enable us to see some of its citizens, the most beautiful of Canadian Parliament Buildings, and the most recent Canadian Pacific Railway hotel. A visit from Dr. Lowe (Med. '88) assured us that all was well in Regina, while the name of McCusker (Med. '16) was obviously prominent in both professional and industrial circles.

Moose Jaw, Sask., may not sound attractive to some of our graduates, but a visit to the town gives assurance to those in Medicine that the West abounds in opportunities tempting to all who bear the future in mind. The hospitals are excellent, the nursing schools progressive, and the town is making wonderful strides. It was a pleasure here to receive the courtesy of a number of our graduates. Associated with Drs. Black (Med. '10), Parkins (Med. '25), and others, McGill has a group clinic that is well worth a visit.

Again, at Medicine Hat, McGill graduates appeared at the station to greet us during the fifteen minutes of our stay. Dr. Boyd (Med. '03), whose son is now at McGill, with Dr. McLeod (Med. '12), and Fisher (Sci. '10), met the train, and were keen to hear the latest news of our activities and personnel.

In Calgary, excitement over the Turner Valley oil development has not hindered the medical activities, or prosperity, of such important graduates as L. S. MacKid, '04, Johnson, '02, O'Callaghan, '10, and MacLaren, '02, and many others whose courtesy and loyalty are always in evidence. It was here at the Chamber of Commerce Dinner, tendered to President Beatty, that the new Principal of the University of Alberta (Wallace) addressed the large gathering on the importance of education in the co-operative development of Canada. It was at this function, too, that we met George McDonald (Arts '04), who, as President of the Montreal Board of Trade, had accompanied the Chamber of Commerce on their tour of the Dominion, and others whom we recognized as benefactors of McGill.

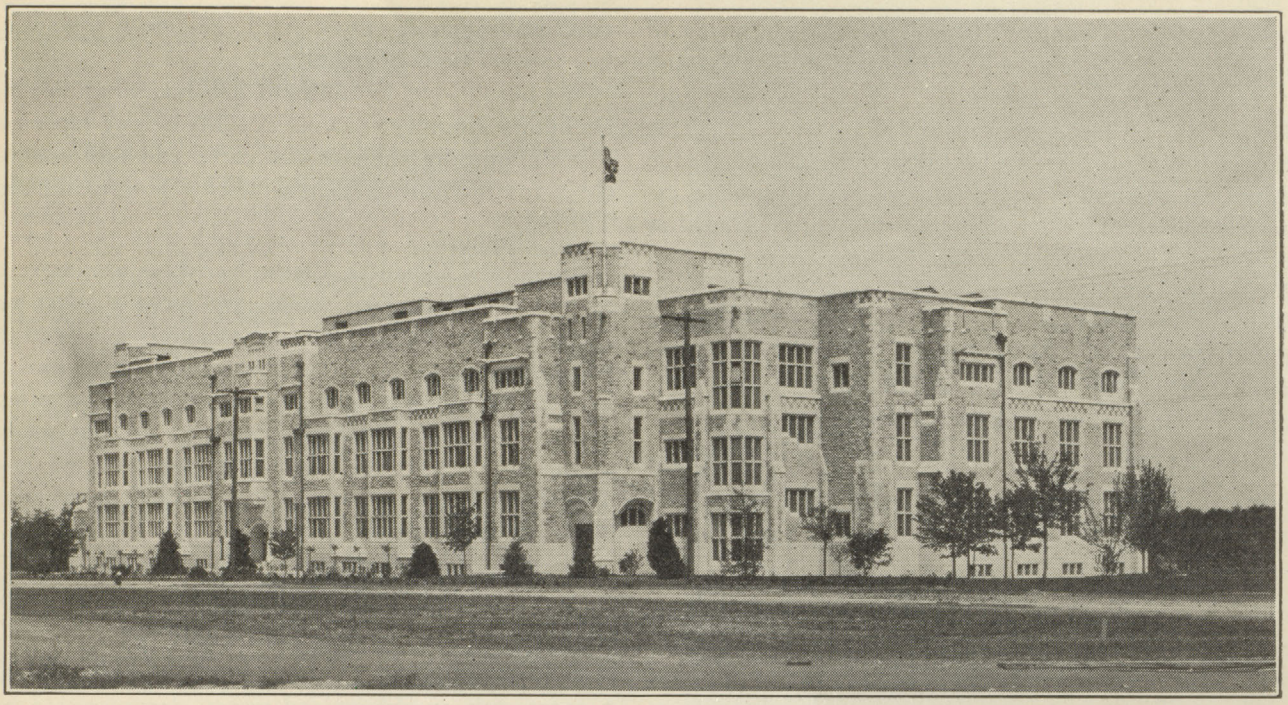
At Banff, where Dr. Dean Robinson (Med. '17) was officiating, in the place of the late Lieut.-Governor Brett, as leading doctor of the town, there was little time for activities other than golf and visits to the charming neighbourhood, with its buffalo ranch, its sulphur springs, and many scenic wonders. Incidentally, it may be said that the Banff Springs Hotel, re-built and enlarged, is undoubtedly the most important and magnificent resort to be found in Canada, or in America.

The visits to Lake Louise, Field, Sicamous, and Kamloops, were without incident so far as graduates of McGill were concerned, and it was not until we reached Vancouver and Victoria that prearranged official McGill functions took place.

First among these was the luncheon in Victoria in the beautifully-appointed Empress Hotel, under the chairmanship of Dilworth (Arts '15). About fifty of our graduates were present, among them many who had already attained distinction in their own country and abroad. Such, for example, as H. E. Young (Med. '88), formerly a Cabinet Minister and now the most important authority on Public Health in British Columbia; W. A. Carlyle (Sci. '77), formerly Chief Engineer of the Rio Tinto Mines, and a world authority on mining; Keyes (Med. '04), most loyal of graduates; Musgrave (Sci. '03); and Drum (Med. '96), whose service in the war received the appreciation of the Government. P. L. Naismith (Sci. '89), formerly Chief of the Department of Natural Resources and now a consultant, was also present; as were Dawson (Sci. '86), Surveyer-General of British Columbia in the former Government; and many others too numerous to mention, but all carrying forward the torch of old McGill. In his address, Chancellor Beatty congratulated the graduates on their continued loyalty, expressing at the same time his understanding of the difficulties of maintaining, in far-off places, an organized interest in their Alma Mater. He dilated on the continued prestige of McGill, which, despite the financial handicap involved in all privately-owned corporations, enjoyed independence in control and, as a result, a broader opportunity as a national institution to meet the country's needs.

The visit to Vancouver was a "high spot" of the tour, so far as contact with our graduates was concerned. No more loyal group exists in Canada, none more enthusiastic and active, or more concerned in the welfare of McGill. At the banquet in the Vancouver Hotel, more than eighty were present, including not only Chancellor McKechnie (Med. '90); W. H. Sutherland (Med. '99), formerly a Cabinet Minister; W. M. Birks, our senior Governor; Glen Campbell (Med. '97), the outstanding ophthalmologist; and F. P. Patterson (Med. '98); but also President Klinck, of the University of British Columbia. The decorations, flags and flowers in red and white, were symbolic of the McGill aspect of the occasion. Hamish McIntosh (Med. '03) was in the chair, and Walkem (Sci. '96), introduced Mr. Beatty, reviewing the development of the University since its foundation, and memorializing such great men as Dawson and Redpath; and others, especially of his own Faculty, whose names had lent lustre to the University.

Mr. Beatty, in reply, drew attention in a general way to the objects of a university training, to its importance in the national life, to McGill's independence of political influence and control, and to its great opportunities, through suitable personnel, adequate equipment, and serious effort, to add still more to its great name. He emphasized the need of great leaders among



ARTS BUILDING, UNIVERSITY OF BRITISH COLUMBIA, VANCOUVER, B.C.

the teaching staff and the influence of the personality factor, with its far-reaching power for educational and national good. As Canadian chairman of the Trustees of the Rhodes Scholar Foundation, he deplored its failure to fulfil the original purpose of the founder, namely, through the broadening influence of its educational opportunities to render possible greater participation of educated men in public life. Few Rhodes scholars to-day are seated in the House of Commons—few, indeed, in any walk of public life. In so far as the Province of Quebec is concerned, it is chiefly the French-Canadian who is active in politics, for, racially considered, the average English-speaking man and the Jewish student are interested in directions other than those leading to a public career. The Chancellor stressed the importance of public service, and of an acquaintance with matters of national concern. He complimented the graduates present on their loyalty and devotion to the University's interest, and their enthusiasm and generosity in financial campaigns.

Dean Martin presented greetings from the Principal, who, he was glad to say, had been restored to excellent health. He surveyed briefly the progress made by the University in recent years, showing how new buildings and equipment, additions to the staff, and progressive work in research had constantly enhanced the prestige of the University. He outlined the prospects of improvement in the near future, with the addition of new buildings and greater facilities for meeting the needs of the nation in research. He expressed the hope that, within twelve months, a campaign for funds would meet with a generous response from citizens throughout the country. It was a regret to everybody, and more particularly to the guests, that this enjoyable function was concluded all too early, the exigencies of travel obliging the Chancellor to leave the banquet at 11 o'clock.

One could not leave Vancouver without realizing the enormous developments that are there taking place, the great opportunities for our graduates in all branches of professional life, and the wisdom of their remaining in their own country, where everything gives assurance of a successful future. Especially in a medical way is Vancouver making great strides, and, although there is as yet no medical school, the pre-professional branches at the University, with its excellent equipment and splendid staff, offer every facility for a sound fundamental education. The recently completed Medico-Dental Building for professional offices, one of the finest on this Continent, is well worth a visit, and the General Hospital in its organization and progressive spirit is second to few in the country.

Leaving Vancouver, the party turned eastward, over the wonderful Kettle River Valley line, with its numerous trestles and still more numerous thrills—a marvel of modern engineering skill, amid delightful scenery and overlooking many productive valleys. And then, suddenly, after some hours of travel through fertile country and pleasant farmlands, we arrived at barren areas, which, with all their bleakness on the surface, contain deep in their interior the wealth of the Indies—lead, zinc, copper, and precious metals beyond computation, and capable of supplying a world with their possible output. In this vicinity is the famous Sullivan Zinc-lead Mine at Kimberley, and near by the great smelting plant at Tadanac, the power plant at Bonnington, and

the active, well-kept town of Trail. In all walks of industrial and professional life, McGill is ably and responsibly represented. S. G. Blaylock (Sci. '99; LL.D. '29) is Vice-President and General Manager of the Consolidated Smelters' organization—the plant, the mines, and all other departments. With him are associated, in the capacity of engineers, eighteen graduates of Science in McGill, among others, Wright, '96; McCallum, '96; Archibald, '97; Murray, '11; Blois, '12; Willis, '11; Montgomery, '15; and there are many graduates in other departments of this enormous industry. Two doctors (Williams, '06, and Palmer, '21), creditably represent the Medical Faculty.

The excellently constructed and equipped modern hospital at Trail is a credit to any city, and the administration may well be a pride to the staff in charge.

Leaving the mineral area for the rich prairie lands to the north, via the Kootenay Lake, there was a weird evening of five hours on the Lake, with the private train on a flat steel barge, travelling in darkness and storm to the landing. A short railway, now under construction, will soon do away with this more romantic, if less speedy, mode of travel.

At Lethbridge, in Southern Alberta, where we made an hour's stop, Dr. Galbraith (Med. '99) represented McGill, guiding some of the party and demonstrating the many interesting features of this progressive town.

At Drumheller, a town in which both the Canadian National and Canadian Pacific Railways are interested, on account of its coal mines, we spent a short time, enough, however, to visit the meagrely-equipped hospital, in which I could find no graduates of our own University. Interesting as may have been the miles of coal seams that were visible from the road, our one fear, in the hour's tour of the district, was that we might miss the train and be held over a night in what seemed the last place on earth!

At Strathmore, another activity of the C.P.R. was evident,—the successful experimental farm, with its magnificent herds of Holstein cattle and Suffolk and Hampshire sheep, its poultry, and its cultivated lands. A room, full of ribbons and prizes, demonstrated how



MEDICAL BUILDING, UNIVERSITY OF ALBERTA, EDMONTON, ALBERTA

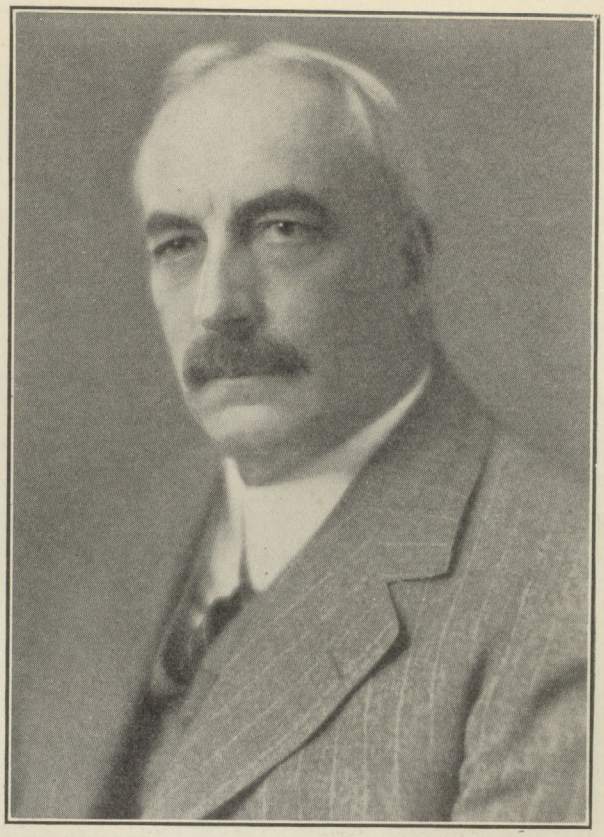
efficient were the organizers and directors of this important asset of the Company.

After a short stay at Calgary on the return journey, we started on our trip north, far up into the waterways, close to the Athabaska River and to Fort McMurray on its banks. Far north though it was, there was abundant evidence of the productivity of the soil in some districts, and also the possibilities in others for future development of industries. Ten thousand square miles of tar sand, capable of yielding as much asphalt as the country may need, await merely a satisfactory process of separation, and transport facilities, to make an industry of world-wide importance. Here Dr. Ells, Sci. '08, another of our graduates, was full of enthusiasm over interesting experiments in the production of asphalt; and others, involving the fish industry and the salt mines.

The visit to Edmonton was in every respect delightful, from the reception at the station by Chancellor Rutherford, of the University of Alberta, a McGill graduate of the year 1881, to the time of our departure in the small hours of the morning. McGill graduates occupy many important positions in the University of Alberta, an institution which does credit to our country, with its modern buildings and equipment, its excellent staff, its progressive President (Wallace), and the enthusiasm of its personnel. Many arrangements were made for our entertainment, chief among them being the banquet given by our graduates to the Chancellor and attended by fifty or more from various Faculties and periods.

The Chancellor of the University of Alberta, who occupied the chair, some years ago vacated the Premiership of the Province, and the present honourable post of Chancellor was accorded him as a recognition of the esteem in which he was universally held, both as Premier and as a man of wide influence in the sphere of education. Many familiar faces appeared at this banquet. In addition to the popular and efficient Dean Allan Rankin, Med. '04, there were present the new Professor of Surgery, Munroe (Med. '06); Egerton Pope (Med. '00), Professor of Medicine; Mewburn (Med. '14); J. J. Ower (Med. '09); the Professor of Pathology, E. C. Smith (Med. '15); F. W. Crang (Med. '01); H. A. Mackay, the local member (Sci. '05); and many others.

The charming spirit of the members present, the many happy speeches that were made in response to those of the Chancellor and the Dean, were evidence of the loyalty that was maintained in this stronghold of McGill. Entertainments that were afforded at the close of the dinner and prior to the train's departure are mentioned merely as an evidence of the hospitality that we received from graduates and other citizens. President Wallace was visited during the afternoon, but, being confined for several hours at a meeting of the Faculty of Arts (in which, as he said, the usual controversies raged!), it was impossible for him to give the party as much time as he would have wished.

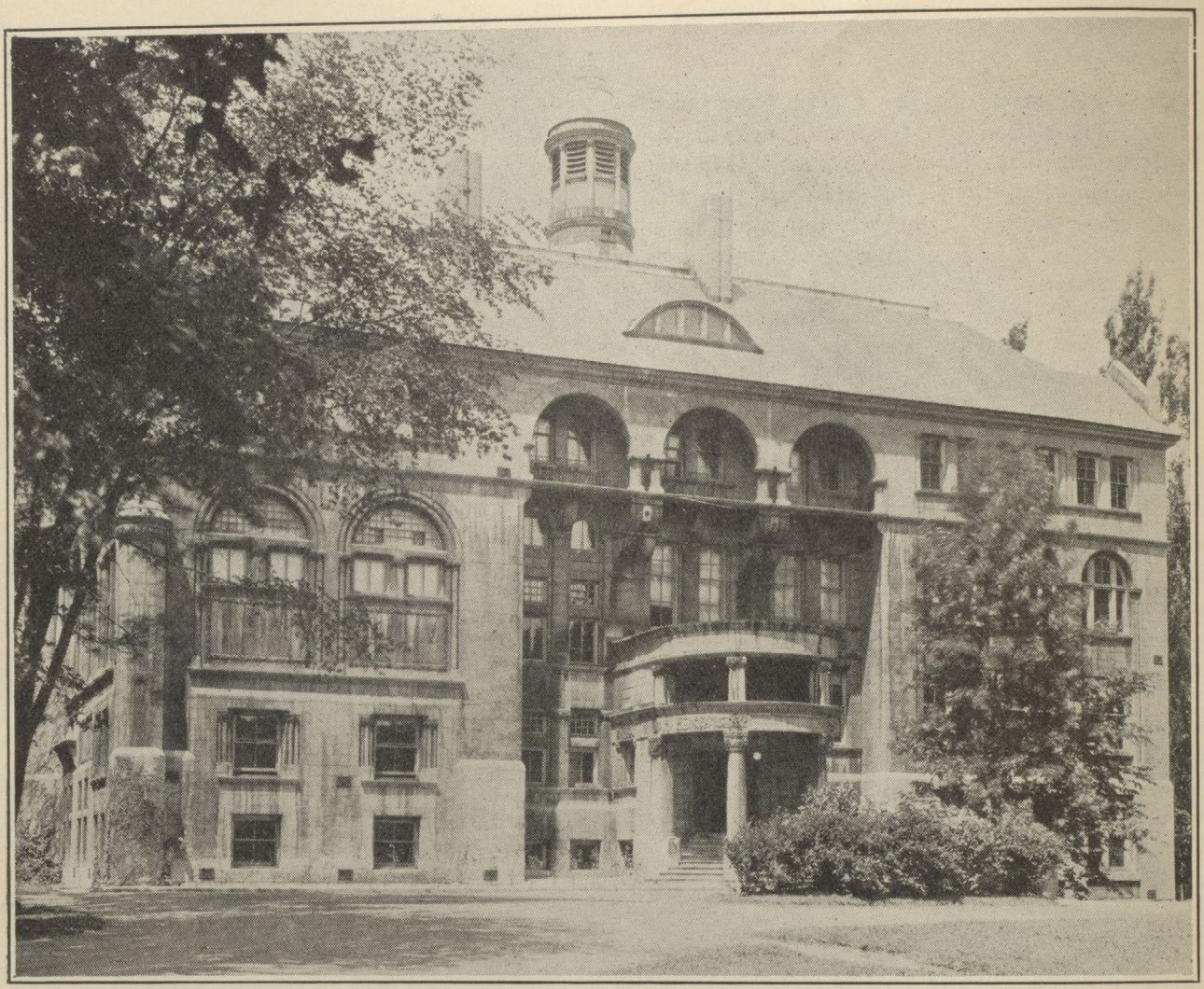


DR. W. HARVEY SMITH, MED. 1892
President British Medical Association 1929-1930

Among the numerous stops made after leaving Edmonton should be mentioned the half-hour's stay at Lloydminster, which was, in large part, burnt to the ground but a short time ago. The Mayor of the town, Dr. Cooke, is a graduate of Queen's, but Dr. Anderson, Med. '10, of McGill, appeared at the station as one of the delegation to do us honour as a guide. Here, in the short time at our disposal, there was little opportunity to do more than inspect the hospital, where a nurse from the Montreal General Hospital was in attendance. At North Battleford, perhaps the most interesting sight was the Provincial Mental Hospital, under the charge of Dr. McNeill (Med. '04). Here is one of the finest mental hospitals in Canada, situated in beautiful grounds, with a magnificent view over the Saskatchewan River, and equipped with every modern facility for the care of patients and for vocational therapy.

Still more to the north was the thriving town of Prince Albert, with eight thousand inhabitants, and if recent graduates of our University have any doubt as to the opportunities afforded in this growing country, I would recommend to them a visit here. At the station was Dr. Brodie (Med. '17), full of enthusiasm as to his environment and happy in the recollection of the opportunities which his Alma Mater had afforded him. In the outskirts of the town is one of the finest sanatoria

(Continued on page 40)



MACDONALD PHYSICS BUILDING, McGILL UNIVERSITY

Etienne Samuel Bieler

By Dr. A. S. Eve

WHEN on the 25th of July of this year news was received of the death of Dr. E. S. Bieler, while on a scientific mission in Australia, none of his friends were more grieved and shocked than his comrades at McGill, for the young professor was, as Sir Arthur Currie has observed, "a successful teacher, a chivalrous colleague, and a loyal alumnus of the University."

Etienne Samuel Bieler was born on February 3rd, 1895, at Lausanne, Switzerland, and when his parents went to Paris he entered the Lycée Carnot. Later, at the age of thirteen, when the family moved to Montreal, he found himself, knowing but few words of English, in the Montreal High School. He rapidly rose; and took first place in his class in seven months. In 1911, he led the Province of Quebec in the matriculation examination with the remarkable average of ninety-four per cent.

He entered McGill University with a Macdonald Scholarship and quickly showed his natural taste and ability, which culminated in the Anne Molson Medal and a First Class in Honour Mathematics and Physics.

Before the Convocation of May, 1915, he joined the First University Company as a private and, leaving Canada on May 28th, went into training at Folkestone and Shorncliffe, after which the Company was incorporated into the Princess Patricia's Canadian Light Infantry, and went to the front trenches at Armentières.

After a few months' fighting, the young private was sent to England to train as a lieutenant in the Field Artillery, and subsequently began his new duties with an ammunition column in Belgium. He was in charge of trench mortars in the Ypres Salient when wounded in the head on August 3rd, 1916. After recovery, he took

part in the Battle of Courcelette, and was severely wounded in the leg on April 28th, 1917. An amputation was narrowly averted, and after long hospital treatment he was given leave of absence to Canada. One of his superior officers wrote about his military career, "A brilliant student and thinker, the whole army life and the war in general must have been abhorrent, but he took his share of its responsibilities with the same earnestness and application which always characterized his work."

He spent two happy months in Canada, but the war restlessness revived in him and he accepted with enthusiasm Principal Peterson's offer to secure for him an appointment in the Anti-submarine Division of the British Admiralty. He arrived at Harwich when the German submarines were an appalling menace; wrecks around the shore, food running short, army communications and supplies threatened! The writer recollects introducing Bieler to Sir William Bragg with the words: "Pure gold," his judgment then and now! He was quickly utilized—at Scapa and on the coast of France—in schemes which, thanks mainly to the skill and gallantry of the Royal Navy and the Mercantile Marine, helped to mitigate the dire submarine attacks.

The war over, he returned to McGill University in February 1919, and continued his studies under the able and inspiring guidance of Dr. L. V. King, when the foundations were laid of his sound knowledge of advanced mechanics and electricity.

In May, 1920, he took his M.Sc. degree, won an "1851 Exhibition" Scholarship, with which he entered Caius College, and became a Research Student at the Cavendish Laboratory, Cambridge, then and now under the direction of Sir Ernest Rutherford. It was a time when the inner citadel of the atom was assaulted by bombardment with the alpha particles of radium, and Rutherford had shown that the mass or weight of an atom is concentrated in a relatively small nucleus. Bieler joined enthusiastically in these investigations, and took his Ph.D. in June, 1923, with a thesis on "The Law of Force in the Immediate Neighbourhood of the Atomic Nuclei."

In Switzerland he had, during the summer of 1926, an amusing experience. Hearing that the Annual Conference of the Swiss Natural History Society was being held in the University of Fribourg, he took the train and, arriving late and unannounced, slipped quietly into the auditorium where the physical section had its meetings. As he entered, a German professor was explaining what he called the "Bieler Law." The young scientist from Canada, not realizing that such a thing existed, was beginning to wonder what was meant, when it dawned on him that, as the subject was the law of force near the nucleus of an atom, his own discoveries were being discussed. By that time the president, a professor in Zurich, had recognized Bieler on the last seat near the door, and at the close of the paper called upon him to answer questions, to the surprise and pleasure of the audience.

On his return from Cambridge, Dr. Bieler was appointed an Assistant Professor of Physics at McGill University, and in recent years he added to his intense interest in atomic physics a keen regard for applied geophysics in the search for ore. With Mr. H. G. I. Watson, he evolved a scheme for exploration within a large insulated loop laid on the ground through which passed an alternating current of a few amperes. By induction, the conducting ore-bodies out of sight beneath the earth respond with a secondary current, and the joint electromagnetic fields can be explored by suitable receiving coils and headphones. Together they measured the ratio of the axes major and minor of the ellipse of polarization. This work took him to some of the famous mines in the Rouyn district in northern Quebec. The outdoor life, the interest of a new problem, and his association with mining men and geophysical prospectors brought a new zest to life, and produced a conflict between his love of pure physics and the attraction of a lively practical problem.

His success in this field led to his being invited to undertake geophysical work in Australia; and he received from McGill University two years' leave of absence to become Deputy Director of an expedition under the joint auspices of the British Empire Marketing Board and the Government of the Commonwealth of Australia. The object of this expedition was to search deeper for ore in Australia, as the famous mines near the surface were diminishing in production, and as new scope for Australian, and possibly for British, miners was most desirable. Had he lived for a few more months, he would have brought back to Canada a remarkable experience in magnetic, electric, seismic, and gravitational methods of exploration, which would have stood this Dominion in good stead.

His was a full life! Soldier, thinker, research student, explorer, a man thoroughly trained, with wide experience of theory and practice. It takes many years to find a man with such natural gifts, and many years again to train him to fruition. There must be enthusiasm as well as power!

Dr. Bieler was a lover of out-of-doors, whether in Canada, England, Scotland, Brittany, Switzerland, Italy, the Netherlands, or Germany, he developed a keen appreciation of nature, of art, and especially of mediæval architecture, in which he became an enthusiastic connoisseur. Many countries were precious to him, but always he had a special affection for his native land in all seasons and in all weathers—Switzerland!

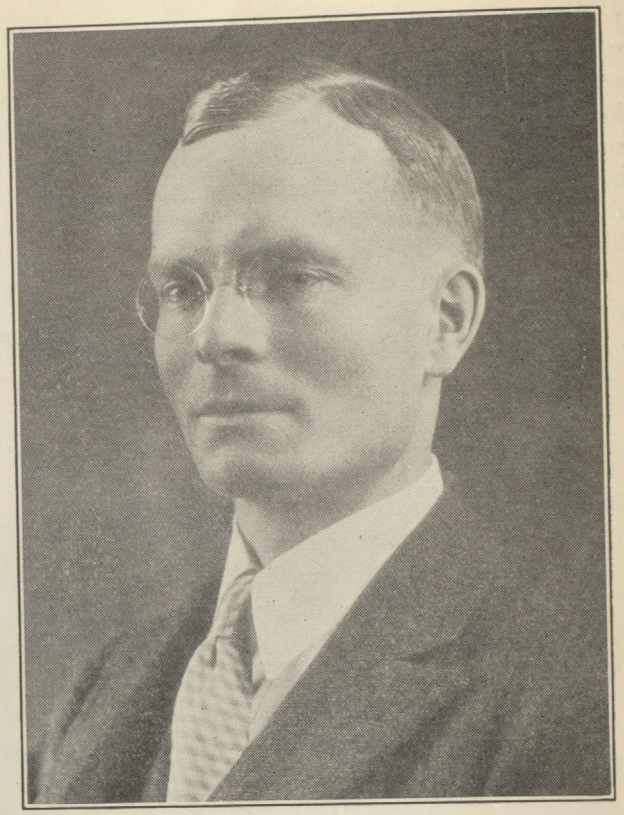
An account of his life would be incomplete without mention of his qualities as friend and colleague, as son and brother. These qualities of character surpass those of genius. Fortunate indeed are those who combine both! Like Faraday, Maxwell, Kelvin, Stokes, and Rayleigh, he was a man of great faith, without too close a definition of dogma. He identified himself with his church, and was ready to work for it and to help its members. I

know full well he was a good colleague and comrade, and as son and brother he reached a summit transcending even the rest of his life's work. His father writes these words, "In our family circle we were constantly uplifted by his radiant personality. We miss his sound advice and his deft hand, his humour, and his affection." In one of his last letters to his mother from Australia he wrote, "You are right, I am not in a religious atmosphere on this continent, but that fact allows me perhaps to think out those problems more independently. As I study the modern-scientific view-point, with its insistence on the organic unity of creation, and on the gradual evolution of inanimate nature towards life, as one of the natural consequences of the laws of matter and energy, some of the old beliefs fail to satisfy me, and I tend towards a conception of God, perhaps less personal, but not less real and not less sublime. And still, when I think of the personalities whose lives and actions are inspired by biblical ideas, when I think of the legacy which they have left behind, heritage of noble example and sturdy moral tradition, I realize that conceptions can never replace convictions, and I ask myself how this treasure can be preserved for our descendants. I see two sides to the revelation of God in the world, one in nature the other in personalities; it seems to me that it should be possible to find a synthesis."

All his letters from Australia and Tasmania, describing the country and its problems, the personnel of his party, the progress of their varied activities, their difficulties, successes, uncertainties, and expectations, were full of enthusiasm and whole-hearted interest in his work.

The news of his sudden death from pneumonia on July 25th, 1929, after thirty-two hours' illness, at Geraldton, Western Australia, came as a terrible blow to all who knew him.

To the nobility of his character, the high respect, admiration, and affection in which he was held, many letters and resolutions bear witness. Among the former may be mentioned those received from Dr. A. C. D. Rivett, Chairman of the Geophysical Executive, East Melbourne, Australia; F. W. Field, His Majesty's Senior Trade Commissioner in Canada; Professor A. D. Ross, University of West Australia; Professor J. P. Madsen, University of Sydney; Dr. A. O. Rankine, Imperial College of Science, London; Professor Maurice Belz, University of Melbourne; Mr. U. R. Evans, Cambridge; Mr. E. H. Guilford, Montreal; and among the latter those passed by the Australian Physicists, Melbourne, Australia, the United Theological College, McGill University, and the Royal Astronomical Society of Canada. Extracts from other letters are given below, also the substance of a number of addresses delivered at an impressive Memorial Service, arranged by the Rev. Professor R. E. Welsh, and conducted by the Rev. Professor A. R. Gordon, both of the United Theological College, McGill University. This service was held in Moyse Hall on October 27th, 1929, when professors, students, and friends assembled to pay homage to a man whose life was so fully and nobly lived.



DR. ETIENNE S. BIELER

Notman

Dr. L. V. King, F.R.S., Macdonald Professor of Physics, McGill University:

. . . "Before me are ten original papers on scientific subjects, published in British, Canadian, and American journals—a noteworthy contribution from the pen of a deeply mourned friend and colleague, cut off in the prime of his scientific activity and production. There is no doubt but that, had Bieler lived, he would have been among the foremost world authorities in the field of geophysical surveying". . .

Sir Ernest Rutherford, P.R.S., Cavendish Professor, Cambridge:

. . . "He was a man of exceptional powers, with good theoretical insight. He was a fine fellow all round, and he is a great loss to your staff. . . His work under me was of fundamental importance, and gave us the first evidence of the laws of force round the nucleus. . . His premature death is a great blow to science, for he had shown unusual aptitude for investigation, and had read widely, and was much interested too in the theoretical aspects of many branches of his subject". . .

(*Continued on page 26*)

The Trees of McGill University

By CARRIE M. DERICK

IN 1855, when Principal Dawson arrived in Montreal, the grounds of McGill College were nothing more than an unfenced common, used for pasturage. A few large trees and a thicket of hawthorns, birches, and alders grew beside a little brook which flowed through the grounds and, presumably, gave the name of Burnside to the estate of the Founder, James McGill. Once a row of butternuts had bordered an old farm road; in 1855, only five or six remained and were "visited every autumn by troops of nutters from the east end of the town." In 1890, one of these old trees still grew in Sir William Dawson's garden at the back of the East wing of the Arts Building; a picturesque ruin of another stood in front of the old Medical Building; a third large tree near the Engineering Building was for thirty years the home of a pair of red squirrels, personal friends of the Principal.

From the first, Sir William Dawson began the systematic improvement of the grounds—prompted not only by his love of beautiful trees and his interest in natural science but, as he said, by the hope that attractive grounds would create sufficient public interest in the College to render the sale of any of its land unnecessary.

Shrubs and herbaceous plants were removed from the old McGill garden, immediately below Sherbrooke Street, then rented to a market gardener. Native trees and shrubs were collected on the Mountain, or bought from country people and Guilbeault's Nursery. Many fine or rare specimens were at various times given to the College by Mr. William Lunn and the Hon. John Young, who had imported European trees for his own place. Later, Mr. Charles Gibb was most generous in contributing rare species from his experimental farm at Abbotsford, P.Q. Major Campbell, of St. Hilaire, presented the College with a carload of young spruces, chiefly the black spruce, *Abies nigra*. A group of these, around a tennis shelter on the east side of the campus, formed a pleasing contrast to neighbouring deciduous trees until comparatively recently. Not only were young trees planted, but seeds were obtained from many sources, and nursery was started in a ravine near Sherbrooke Street.

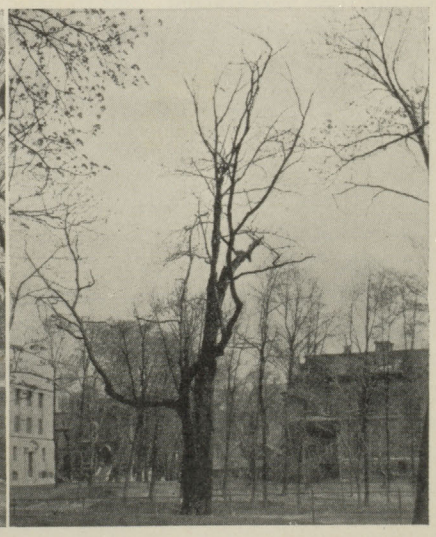
In a paper entitled "Trees on the McGill University Grounds" which appeared in the *Canadian Record of Science*, December, 1891, Dr. Dawson stated that in 1853 Mr. Shepheard and Mr. J. Symmers had given the University a plan for laying out the grounds and for the conversion of Sherbrooke Street into a boulevard with four rows of trees. But the passage of the main pipes of the reservoir through the grounds of the University and the planting of a central avenue made this plan impracticable. Therefore, a second plan for the development of the east side of the campus was made by Mr. Shepheard, and work was for a time carried on in accordance with it. The recently formed Graduates' Society took an active interest in the matter and began to plant a "Graduates' Walk" extending from the



The Catalpa that stood on the edge of the hollow near the Peter Redpath Museum



The beautiful avenue of elms, looking towards the Roddick Gates



The "Great Oak", a child of one of the oaks that Cartier saw in 1535 near the path leading from his landing place to the village of Hochelaga



The "Founder's Tree," an elm planted or preserved by James McGill

Lombardy Poplars east of the Physics Building

The Purple, or Copper, Beech on the path to the Biological Building

Founder's Tree along the brookside to Sherbrooke Street. One of its elms was planted in honour of the visit in 1860 of King Edward VII, then Prince of Wales. A few of the trees remain near the path leading to the Physics Building.

Before many years the campus contained a large number of native and foreign trees. But the unavoidable sale of land and later the erection of new buildings, ended the attempt to establish an arboretum and botanical garden on the campus, a work which had been undertaken by Professor Penhallow upon his appointment in 1883. As many as possible of the specimens were transferred to the "McGill Botanic Garden" on Côte des Neiges Road above "The Priests' Farm" when it was leased by the University from the Trafalgar Institute about 1890. Here beds of classified plants were soon completed, the greenhouses were extended, and a nursery of seedling trees was started. But in little more than ten years the property was sold, and rare and beautiful specimens were lost for ever.

Many of the trees left on the campus continue to increase in loveliness. The elms, *Ulmus americana*, are undoubtedly the most characteristic feature of the grounds. It would be hard to decide when they are most beautiful—in early spring when their tossing branches are fringed with delicate flowers and unfolding leaves; in summer when blue sky is glimpsed through depths of green; in autumn when the soft yellow leaves are a rich contrast to the maples' crimson glories; or in winter with boughs laden with snow, or gleaming with hoar-frost. It was originally intended to have an unbroken row of elms along each side of the avenue. An inner row of silver or soft maples was planted at the same time, partly to protect the elms and partly to afford shade before the elms could do so. It was intended in time to remove the maples and have an avenue of elms alone, but a few of the latter died and were replaced by maples. Three elms near the Roddick gates were poisoned only last summer by gas escaping from leaking pipes. One fine elm near the Chemistry Building is known as the "Founder's Tree" because it was either planted or preserved by Mr. McGill. A stately tree at the top of the avenue on the east side was planted by Lady Dawson in 1858.

When Jacques Cartier first visited the Indian village of Hochelaga on October 2nd, 1535, he noticed numbers of "goodly great okes" growing along the path leading from the boat-landing, the ground being strewn with their large acorns. No finer trees, he said, could be found in France. In 1855 there were several big red oaks, *Quercus rubra*, growing near the brook and four were still flourishing in 1891. The last to survive stood below the Physics Building until two weeks ago, when it was felled. Its annual rings of growth could not be counted because of decay. It was, however, a companion tree to one cut down in 1890, which showed one hundred and sixty growth rings. These trees were, therefore, only the children of the "faire okes" that Cartier visited four centuries ago. A drawing of the "great oak" is reproduced in the foreground of a restoration of the Indian town of Hochelaga in Sir William Dawson's book, "Fossil Men", published in 1880.

Regrettable as is the death of noble trees, still sadder is their unnecessary loss. For more than forty years a magnificent hybrid catalpa grew near the Redpath Museum on the upper side of the hollow. It was attacked by fungi near the base, and last July tree surgeons cleaned out the rotted portion preparatory to filling the cavity with cement. At the end of the day the wound was left unclosed, and during the night the tree was levelled by an usually heavy wind. Fortunately, it has left descendants. Its seeds were sown by Dr. Penhallow in the old Botanic Garden and, when this was abandoned, ten seedlings were transplanted to the campus. Three survive near the Engineering Building, but twenty years

or more must elapse before they can attain the size of their parent.

There are two North American species of Catalpa. The Eastern Indian Bean, *Catalpa catalpa=C. bignonioides*, is believed to have had its original home in the South-eastern States, but as it is hardy as far north as Massachusetts, it may have been indigenous in these colder latitudes. It is a large spreading tree with thin, flaky bark, broadly-ovate pointed leaves, and loose clusters of large bell-shaped, two-lipped flowers, which are white, flecked with yellow and purple within. The slender rounded pods about a foot in length cling to the tips of the smaller twigs long after the leaves have fallen. Perhaps this habit may account for the old Indian name, Catalpa, which means "winged head". Mr. Charles Gibb gave several specimens of this tree to the College but, although they grew rapidly at first, they never blossomed and finally succumbed to the severe winters.

The second American species, the Western or Hardy Catalpa, *Catalpa speciosa*, also known as the Catawba Tree, is found in the woods from Illinois to Tennessee. It reaches a height of one hundred and twenty feet, with a trunk not more than four or five feet in diameter. The leaves are not strongly scented, the flowers are only slightly mottled within, the panicles are short and few-flowered, and the pod is sometimes nearly two feet in length and nearly an inch in diameter. In both species the seeds are flat with large lateral wings finely dissected at the ends. The seeds may thus fly far in the wind, or float long distances on the water, leading to wide distribution.

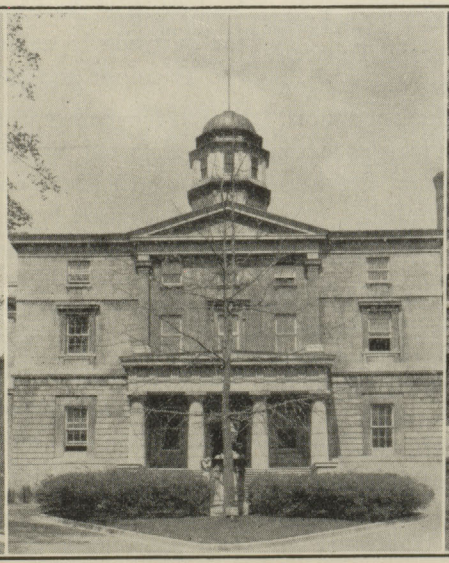
In 1864, a Japanese species, *Catalpa Kaempferi*, was planted by Mr. Teas of Carthage, Illinois, in a nursery containing the two American types. Eventually, the Japanese tree produced one pod of seed wholly unlike any hitherto known. These seeds were planted and a tree resulted which was almost intermediate in character between the Japanese and American trees. Mr. Teas thought that a cross had taken place between the Japanese Catalpa and *Catalpa speciosa*, but Professor Sargent of the Arnold Arboretum of Harvard believed one parent was *Catalpa bignonioides*, because this species flowers at the same time as the Japanese while the Western tree blossoms from two to three weeks earlier. While the parentage of the hybrid, called Teas' Hybrid Catalpa or Catalpa Teasi, was still in doubt, Dr. Penhallow made a detailed study of the microscopic characters of the wood of all four forms. His success in basing a classification of North American Gymnosperms upon the anatomical characteristics of the woods led him to hope that he could thus establish the ancestry of the hybrid Catalpa. His findings confirmed Professor Sargent's view. The wood of the hybrid was intermediate between that of the Japanese and that of the Eastern American Catalpa, although in several particulars the Japanese parent was dominant. It had been suggested that the new type was a bud sport or mutation, which would remain fixed in future generations. But Professor Penhallow's seedlings of the second generation obeyed Mendel's law in that the majority showed the dominant qualities of the Japanese grandparent, only a few exhibiting the recessive characters of the American grandparent.

Teas' hybrid is a magnificent tree displaying heterosis or hybrid vigour as is often the case with the offspring of unlike individuals. It grows more rapidly and is hardier than either parent; its heart-shaped leaves are much larger, and the drooping clusters of flowers are twice as large as those of the American and three times as large as those of the Japanese tree, though the individual flowers are smaller. It is also remarkable for its longer period of bloom extending from June to

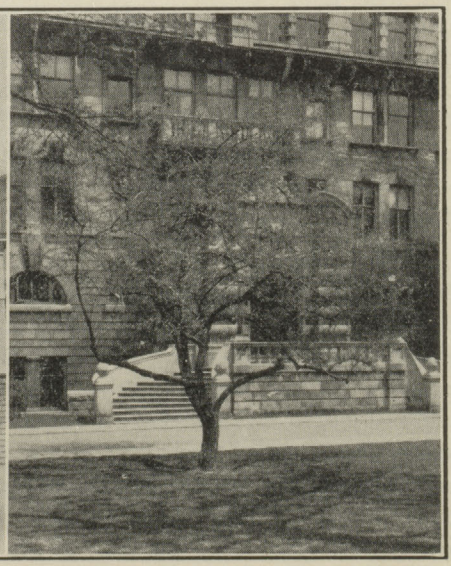
(*Continued on page 27*)



Cut-leaved Weeping Birch, near the Biological Building



The Ginkgo, in front of the monument to James McGill



The Spindle Tree, or Enonymus, in front of the Engineering Building

Athletics

The Football Season

AFTER a season marked by the first appearance in the senior league of a team from the University of Western Ontario, Queen's are Intercollegiate champions.

Before the season opened, McGill was accorded a good chance to defend the championship successfully, but misfortune dogged the red and white, injuries affected the team severely, and the season ended disappointingly. Some hint of what was to come appeared in the first game of the year, when McGill defeated Royal Military College on the Molson Stadium. It was a win; but the 3-0 score against an intermediate team was not impressive.

Again on the following Saturday against Queen's, McGill failed to display championship calibre, and threatened the Queen's line seriously only once. On the occasion of the sole threat, an onside kick was gathered in by Queen's behind their own goal line and McGill scored one point only. Queen's scored a total of 11 and fairly earned the win.

On October 12th, the University of Western Ontario appeared for the first time on the Percival Molson Stadium and was defeated 10-7. In the first half McGill could do no wrong. Time and again Western's line was in danger, and twice McGill swept over for touchdowns, once after a run by Kritzwiser and Doherty, which was as pretty a play as the season produced. In the second half, when McGill weakened, Western scored 7 points, but could not overcome McGill's lead.

An interesting feature of the game was a broadcast of the play in French, sponsored by the Imperial Tobacco Co. of Canada and delivered through Marconi Station CFCF. Mr. E. C. Amaron (Arts '23), the announcer, gave a clear account of the play, a difficult feat, as many football terms possess no French equivalent. Previous and subsequent games were broadcast in English.

Another feature of the game was the presentation at half-time of a McGill banner to Capt. Paul Hauch, of the Western team. In presenting the banner, H. M. Jaquays, President of the Montreal Branch of the Graduates' Society, explained that the Society gave it so that it might fly whenever a McGill team visited London, Ont., just as the banner of Western University was at the moment floating beside that of McGill over the field-house at Molson Stadium. Mr. Jaquays added a few words, welcoming the men of the University of Western Ontario into the Intercollegiate senior series, where he hoped and believed they would find sportsmanship of the type which strives mightily for success, but considers honourable defeat more desirable than unworthy victory.

Encouraged by the win from Western, McGill played 'Varsity in Toronto on October 19th. For twenty-five minutes the play was even, each side having scored 1 point, but just before half-time a McGill back fumbled a kick and 'Varsity scored a touch-down. A sensational 85-yard run, in which a half-dozen Toronto men handled the ball, added to 'Varsity's total in the second half and the game ended with the score 11-1.

All hope of a McGill championship faded the following Saturday, when a weakened McGill team travelled to Richardson Stadium in Kingston and was defeated 25-0 by Queen's. 'Varsity defeated Western Ontario in London by 6-2 on the same day and appeared in consequence as Queen's only rival for the championship.

On November 2nd, 'Varsity and McGill met on Molson Stadium, in the presence of Their Excellencies the Governor-General and Lady Willingdon, and, for the second time, Toronto won. Despite injury to two players in the first few minutes of the game, McGill held splendidly in the first half, which ended with the score 'Varsity 1, McGill 0. In the third quarter Toronto scored a touchdown and a rouge, and in the final quarter, two drop-kicks sailed over the bar and between McGill's goal-posts, making the total score 13-0. On the same afternoon Queen's defeated Western 14-0, retaining the leadership of the league, with 'Varsity threatening, and the outcome depending on the result of a clash between the Tricolour and the Blue on the following Saturday.

On November 9th, McGill travelled to London and were defeated by the University of Western Ontario 10-2, a still heavier score being rolled up against them in Montreal on November 11th, when, in a city championship game, M.A.A.A. scored 16 to McGill's 1. It was not an inspiring end to the season, but inspiration can be found in the team's display none the less. Beaten in almost every game and seriously affected by injuries, the players fought to the last whistle in the last game, their sportsmanship reflecting to the genuine credit of McGill.

'Varsity defeated Queen's in Toronto on November 9th and a play-off for the championship was necessary. This game took place in Kingston on November 16th and was won by Queen's, 15-5. On the season's play, Queen's fairly deserved the win.

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CONTRIBUTED.—The article on "Immigration" was contributed by a graduate of McGill University who on account of his official connections judges it most appropriate not to write under his name.

J. W. B. H(ANINGTON).—Dr. Hanington graduated in Medicine from McGill University in 1905, and was engaged in the British West Africa Colonial Services when he died at Ibi, Nigeria, in 1928. Dr. Hanington had many artistic accomplishments, and on one occasion produced an entire operetta in Victoria. "Sonkwala" was inspired by a well-known mountain in Nigeria.

Immigration or Industry

Contributed.

IN bygone days Castilian Dons were wont to seek the Elixir of Life in the New World. Today in the New World we are seeking a political Elixir of Life; the Dons in our Canadian seats of learning wax hot in its pursuit. This Canada of ours has made good its boast to dominion from sea to sea and the British flag flies unchallenged over the half of North America. Our guns have spoken with effect across the stricken fields of Flanders and the voice of Canada has been raised in the councils of the world. Canadian keels plough the waters of many a foreign harbour, and the wares of Canadian merchants are displayed in many a distant marketplace. The handfuls of gentlemen adventurers who first climbed the slopes of Mount Royal or threaded their ways amid the ice-floes of Hudson Bay have grown to some nine millions of souls, and their worldly goods are reckoned in billions of dollars. The history of Canada is a record of proud achievement, and commands the respect of the civilized world. Surely the most vaulting ambition might say it is enough. Yet, in spite of all our prosperity, there remains a rankling suspicion that it is not enough. As a race, Canadians are possibly the most critical people in the world, the least susceptible to the wiles of the worthy Babbitt, and the minds of most of us are darkened at times by a persistent doubt that will not be denied.

There were two Irishmen once, if an ancient tale will bear repeating once more, who were cast with their families upon the inhospitable coast of a desert island. Their provisions failed them, and they found themselves far from the hope of human assistance without visible means of support. Famine stared them in the face, but they did not despair. Their native political genius was equal to the occasion, and when, after many weary months, the castaways were rescued by a passing schooner it was found that they had contrived to eke out a precarious existence by taking in each other's washing!

At the risk of being thought facetious, it would be well for us to ponder the moral of this tale. Canada, it is true, is the largest country in the western hemisphere—geographically. Much of this territory is eminently adapted to agriculture, its forests are vast and valuable, it is well watered and richly seamed with mineral wealth. None the less, numerically speaking, Canada is weak, and the fact that her population is scattered far and wide renders the cost of the essential services of modern civilization high, even excessive. It is commonly asserted that the remedy is simple—increase the population by a generous stream of immigrants and all will be well. The cost of transportation, of local improvement, of the distribution of commodities, all will diminish and the problem is solved. The question we must today ask ourselves is "Is this true?"

It is obvious that it is simple to obtain immigrants. All that is needed is a sufficiency of alluring pictures of waving wheat and a not too close inquiry

into the racial or moral antecedents of those to whom the appeal is made. To inhabitants of Eastern Europe, for example, where land is hardly to be won and is therefore much prized, and where the shadows of conscription and impending war brood always over the landscape, a quarter section looms large and attracts like a magnet. Hard manual labour, whether on a farm or in a mine or a forest, is not distasteful to such, for they have never known an existence without strife or hardship. The life may not appeal to a Lancashire mill hand, used to the pleasant charms of "pubs" and cup-ties and secured against the more pressing forms of want by cunningly devised insurance against sickness, old age, and even unemployment itself. The versatility of Canadian life comes as a shock to a member of a powerful and established trade-union, accustomed to performing tomorrow the same task as he did yesterday, according to an inexorable division of labour on familiar and long established lines. It is hard for such an one to realize that the piping days of making munitions are no more, and that once more man has yielded place to the machine. It is not to be marvelled at if he prefers politics to pioneering and seeks through parliamentary means a remedy of unfailing potency—"A Short Bill . . . "

Even in Canada there are those who would legislate us into the possession of the wealth of Croesus by the stroke of a pen—if we would but hearken unto the voice of the prophet crying in the wilderness. Yet we remain as deaf as the adder to their entreaties, because deep in our consciousness we know that we might as well seek to raise ourselves by our bootstraps as to take in one another's washing.

Let us look a little more closely at the appeal of the Land. Which of us, who has travelled even for a brief space across the broad expanses of the western prairies has not felt the imperious call of these untamed acres tugging at his heartstrings? Is there one of us who has not thrilled at least once at the display in the window of some colonization office, beckoning us to partake in our common heritage? Let him stand forth that we may look upon him and know him for the base varlet that he is to whom the glory of our Dominion is but a vain thing. It is a worthy instinct, this, which led our fathers to subdue the wilderness and make it yield profit to them, and it is right that we should glory in their achievement, but it does not follow that we, too, should bow down to this instinct and worship it, because Canada is no longer a wilderness, and we, dwelling in a civilized land, must learn to subdue instinct to reason.

There is an elementary principle of economics, which has been dubbed the Law of Diminishing Returns. It is a principle so elementary that it is in danger of being forgotten. The owner of a field, which is so large that he cannot till it in its entirety, may with profit hire others to work for him or even augment their efforts by the application of machines to the cultivation of his land, but there is a limit to the number of men or the amount of machinery which can be profitably employed on a given amount of land. The march of modern invention, which has given us the gang-plough, the binder, the thresher, the tractor and, finally, the combine, has increased inconceivably the area which one man may successfully hope to till. The marketable quantity of milk, butter or meat per head of stock has been enormously increased, and the means for handling and bringing to market in good condition these

commodities have also been augmented in a corresponding ratio. The impending peril of a nitrogen famine has been averted, and we now squeeze fertilizers from the air by millions of tons every year. It is only necessary to peruse the admirable reports of countless experimental farms to realize that a very small fraction of the earth's surface will suffice under intensive culture to support indefinitely the food requirements of the human race. It is not improbable that a region such as Alberta, possessing an alluvial soil of enormous depth, could support the whole of North America for centuries. Almost we are tempted to say "Why worry?"

And yet we do worry, for scarcely a day passes that we do not find in our morning paper a reference to the Farm Problem. In spite of the benefits that Science and Invention have showered upon him, the farmer somehow contrives to do a lot of worrying, and not all of it is inarticulate. It would seem, if we are to listen to the farmer, that all is not well with him. Even though certain types of farming have almost been reduced to a matter of pressing a button, and although vastly increased yields of butter, bread and beef are the rule rather than the exception, the farmer feels that the financial returns are inadequate, that, in short, the game is scarcely worth the candle. Let us look a little further and perhaps we can see the reason.

There is another ancient principle of economics, so hoary that it is often left out of the calculations of economists. It is called the Law of Supply and Demand. It states that in a free market successive portions of a commodity will command a progressively lower price and that in the long run the yield will be determined by the price of the last portions marketed. Here, in a nutshell, is the key to the problem. An hungry man will give all he has for a crust of bread. He will cheerfully pay ten or fifteen cents or more for a loaf of bread each day. On the other hand he will probably decline to purchase and eat a second loaf, and if you suggest that he purchase three loaves for his daily ration he will run you off the lot for a fool.

Canada has grown to be third or fourth amongst the exporting nations of the world, largely through the efforts of her farmers. If Canadians were to attempt to consume all the foodstuffs they produce, let alone what they are capable of producing without a single added immigrant, they would perish to a man of acute indigestion. It is essential that these commodities be sold abroad in order that they may be sold at all. But here enters a difficulty. The foreigner is a wily fellow; he prefers to buy in a competitive market, and so in the long run Canadian wheat and Canadian Beef and Canadian Bacon must be sold at the same price as wheat from the Argentine or from Russia, steers from Calgary compete with steers from Wyoming or La Plata and Quebec mutton must struggle for existence against mutton from Brisbane or from Sydney.

Now we begin to see the fallacy of more and better farmers. It has been said, with some semblance of authority, that only one-eighth of the farmers of the United States conduct their business along efficient lines, and the remaining seven-eighths eke out a precarious existence on the borders of insolvency. If by dint of super-salesmanship, experimental stations and the like, the seven-eighths should be converted until but one-eighth remain in their benighted ignorance, what would be the result? Who would buy the increased amount of foodstuffs and what price would the lot fetch? It would

not be too much to expect that the increased production would be four times the present figure; in all probability it would be much larger. Even if it were but twice as much the average non-farmer can only spend a small portion of his income for food and would certainly not be prepared out of the greatness of his heart to go naked in order that he might eat twice as much. To the more wealthy, who at present east more than most doctors consider advisable, the slogan of "eat more bread" falls upon deaf ears—it can't be done! Ergo, at the most about one and a quarter times as much food would be sold the following year and the remainder would be bought in at slaughter prices by the warehouse interests for the year after next. But here is a new marvel. The seven-eights efficient farmers would all share equally in the one-and-a-quarter times augmented sales and the takings of the original one-eighth would be reduced to one seventh of last year's figures, while their expenses would remain the same. As even the efficient farmer does not make 700% profit, it is hard to see how he would avoid bankruptcy; in fact the only lucky man would be the maker of agricultural machinery and he might be disappointed when he tried to collect on his notes. Our neighbours' washing would yield a very poor profit.

This is the teaching of experience. Canadians are a hard-headed lot and inclined to let George do the experimenting until they see how it stacks up. It is to be questioned whether Canada would consciously contemplate a fifty per cent increase in agricultural production with equanimity. If this is so it would seem that it is unwise in the extreme to place more people upon the land until those now in occupation are unable to cope with the demand. It is, of course, possible to place newcomers in the farming business, but only if they are willing to live on an inferior scale to those now in possession and these latter can only meet the new competition in two ways: Either the established farmer must increase his holdings and avail himself of more efficient methods, or he must lower his standard of living to that of the Central European immigrant.

There is, of course, a political angle to the problem. The farmer has not yet entirely dispensed with manual labour, and during a brief period of the year he needs extra labour of a type which does not mind hard work for small returns. The Central European and Eastern European immigrant is suitable for this purpose, but the problem of his support during the balance of the year is difficult. Mines and forests may absorb some of the surplus, but only too often the excess drifts back to industrial centres and becomes a charge upon the community, that is to say, upon the rest of Canadian Industry through local rates or charitable organizations. It is a little difficult to suggest a solution to this problem. An Utopian measure would be a sort of corvée, levied upon young men in other industries each year, by a form of agricultural conscription, but this smacks too strongly of state socialism and Mr. Bellamy to commend itself to common sense.

After all, agriculture is an industry, and like other industries there is a unit size below which cost of production becomes prohibitive. The true solution of the farm problem lies not in artifically stimulated immigration or in bemoaning the drift to the city. It lies in the accumulation of farm holdings in strong hands and the gradual elimination of those unfitted by temperament for efficient production in agriculture. It is often urged that the

inefficient farmer should be coddled and preserved as an antidote to Bolshevism, because he is part of the political backbone of the country. Eastern criticism of agrarian unrest in the prairies is not consistent with this view; experience in the United States has shown that the embattled farmer is inclined both to see and to act "red" when he finds a living difficult to win. The true bulwark against the insane propaganda of the "red" in industrial centres is to improve the living conditions of the working man and build up his purchasing power so that he no longer has the incentive to upset the political apple-cart from motives based on fear and jealousy. Our motto should be not "More Farmers", but "Fewer and Better Farmers."

But what of our immigration policy? Are we to have no immigrants? Is Canada to be a sparsely populated desert with oases of affluent farmers? No! A thousand times, no! Canada needs immigrants, but not at the price of a native born Canadian emigrant for each newcomer. There is a very simple solution for keeping immigrants in Canada, or reducing the number of those who leave our Dominion. Originally immigrants poured into both the United States and Canada in hundreds of thousands annually. Why did they come? To find jobs, of course! These wanderers came attracted by the certainty of new jobs on new work, railways, mines, shanties and the fields. The situation is different today. We are not building railways at the rate of a mile a day, and as we have seen the farmer is rather too numerous. What then shall we do to keep our immigrants? Find them jobs, to be sure!

The secret of successful immigration, a flood of new citizens which rears itself against the portals of a new country, and flows in through any crevice which permits of entry even though it be illegal, is capital. The United States, by a policy of continually increasing production, has an ever increasing supply of capital seeking employment, and workers flock to it as filings to a magnet. Even in Canada, in the past decade, the new industries which have grown up beside our mines and forests and waterfalls have been besieged by applicants for work.

It is impossible to retain immigrants without employment to offer them; it is next to impossible to keep them out if an opportunity for labour exists. What Canada needs is immigration of capital; immigration of workers will come as a matter of course.

It is a common fashion to decry the influx of American capital into Canada. No greater mistake could be made. It is a justification of the soundness of our position, that foreign capital should flow in from without. It is the tangible proof that Canada is indeed a land of opportunity. It may be a matter of regret that more British Capital does not come to Canada. If American capital can find profitable employment in Canada, either the possessors of British capital will in time be moved to emulation or they will live to regret lost opportunities. If the opportunities exist, as the present influx of capital proclaims that they do, it is immaterial whether the capital comes from Chicago or from China, the growth incident upon industrial development is sure to follow.

What can be done to stimulate this growth? Much. Canada is eminently adapted in virtue of natural resources and location for the manufacture of many products. Research along appropriate lines will reveal countless opportunities such as prompted the Aluminium Corporation of America to

erect a plant in the Saguenay. Marketing research will develop new markets at home and abroad. There is a tendency amongst some of us to lament the absence of a higher protective tariff. To some extent it is true that tariffs foster industry. On the other hand, the true protection against a competitor is a lowered cost of production. Researches directed along lines tending to bring our costs of manufacture on a par with or even below those of our rivals are the true form of protection. It is but the application to peace of the soldier's maxim that offense is the true defense.

In conclusion, let it be firmly stated that to foster the immigration of men before the immigration of capital is unsound. It is likewise unsound to expect that agriculture is capable of indefinite expansion and improvement. The way to create new markets at home is to create new wants and to provide the purchasing power to satisfy them. The way to keep out foreign competition is to do as the other fellow does, only do it cheaper and better. The way to increase development in a new country whose capital is all engaged in productive effort is to attract foreign capital. The way to procure immigration is not to advertise for men, but to advertise for money. There is nothing fundamentally wrong with Canada; all we have to do is to realize, once and for all, that what we want in Canada is not Immigration, but Industry, and that if we take care of our industries, immigration will take care of itself.

The Brass-Bound Man—

A Plea for Donnacona

By WILFRID BOVEY

Illi robur et aes triplex
circum pectus erat.

"When the robust and brass-bound man commissioned first for sea
His fragile raft, Poseidon laughed, and, 'Mariner', said he,
'Behold, a Law immutable I lay on thee and thine,
That never shall ye act or tell a falsehood at my shrine.

. . . . . .

In dromond and in catafract—wet, wakeful, windward-eyed—
He kept Poseidon's Law intact (his ship and freight beside),
But, once discharged the dromond's hold, the bireme beached once more,
Splendaciously mendacious rolled the brass-bound man ashore.

. . . . . .

The thranite now and thalamite are pressures low and high,
And where three hundred blades bit white the twin-propellers ply;
The God that hailed, the keel that sailed, are changed beyond recall,
But the robust and brass-bound man he is not changed at all!

From Punt returned, from Phormio's Fleet, from Javan and Gadire,
He strongly occupies the seat about the tavern fire,
And, moist with much Falernian or smoked Massilian juice,
Revenges there the brass-bound man his long-enforced truce!"

RUDYARD KIPLING.

FOR nearly four hundred years Donnacona, the Indian "King of Canada" who met Cartier on his arrival at Stadacona, has been held up to the world as a remarkably inventive liar. Four hundred years is a long time, and if Donnacona was not a liar it is quite time that he was proved innocent.

The original story on which the indictment of Donnacona is based is found in the narrative of the Cartier voyages. Let us reconstruct the background of the tale by a few quotations; so we shall understand its relation to the rest of the "Recit."

In the month of September, 1535, on his second voyage to the western world Cartier anchored off Ile aux Coudres, 60 miles below Quebec. "*Le VIIe jour dudict moys, jour Nostre Dame, après avoir ouy la messe, nous partismes de ladicte ysle pour aller amont ledict fleuve; et vinsmes a xiiii ysles, qui estoient distantes de ladicte ysle es Couldres de sept à huict lieues, qui est le commancement de*

la terre et prouvynce de Canada". The King of this "land and province" was Donnacona.

When the narrator uses the word "Canada" he has in mind the geography of the Indians met by Cartier lower down the river. For them there were three countries about the St. Lawrence,—Honguedo or Gaspe, Saguenay and Canada. "*Le landemain, le seigneur de Canada, nommé Donnacona en nom, et l'appellent pour seigneur agouhanna, vint avecq douze barques, acompaigné de plusieurs gens, davant noz navires; puis, en fict retirer arrière dix, et vint seullement avecques deulx* [*desdictes barques*] *à bort desdictz navires, acompaigné de seize hommes. Et commança ledict agouhanna, le travers du plus petit de noz* [*trois*] *navires, à faire une prédication et preschement à leur modde, en démenant son corps et membres d'une merveilleuse sorte, qui est vne serymonye de joye et asseurance*". Donnacona was quite sincere in his "joy and assurance"; he gave Cartier a thorough Canadian welcome and strongly objected when his guest proposed to travel further up the St. Lawrence. Cartier, as we all know, proceeded to discover Hochelaga and when he returned, Donnacona treated him like an old friend.

At this point in the narrative we find what is apparently an exhaustive summary of information gleaned from the Indians concerning neighbouring territories. It is headed "CHAPPITRE D'AULCUNZ ENSEIGNEMENS QUE CEULX DU PAYS NOUS ONT DONNE, DESPUYS ESTRE REVENUZ DE HOCHELAGA". The first description given is that of the "Kingdom of the Saguenay" which lay about a month's journey "west northwest" and was reached either by the Ottawa or the Saguenay. "*Et nous ont dict que le tout de la terre, despuis ladicte première ripvière jusques audict Hochelaga et Saguenay, est vne ysle, laquelle est circuitte et envyronnée de ripvières et dudict fleuve; et que, passé ledict Saguenay, va ladicte ripvière entrent en deux ou troys grandz lacqs d'eaue, fort larges; puys, que l'on treuve vne mer doulce, de laquelle n'est mention avoyr veu le bout, ainsi qu'ilz ont ouy par ceulx du Saguenay; car ilz nous ont dict n'y avoyr esté.*"

It is easy to identify the territory here described and the designation of "Saguenay" as an island is not inaccurate. Mr. H. P. Biggar, the latest editor of the narrative, points out: "The head waters of the Gatineau, a tributary of the Ottawa, lie in fact within a very short distance of the Chamouchouan, which flows into Lake St. John, whence the Saguenay takes its rise. The region between the Ottawa and the Saguenay rivers is therefore virtually encircled by the Gatineau, the Ottawa, the St. Lawrence, the Saguenay and the Chamouchouan". The people and their possessions are described thus: "*Et nous ont faict entendre, que audict lieu les gens sont* [*vestuz et*] *habillez de draps, comme nous, et* [*qu'il*] *y a force villes et peuples, et bonne*[*s*] *gens, et qu'ilz ont grand*[*e*] *quantité d'or et cuyvre rouge.*" Next follows the description of the country a month's journey to the south and of its people, given by the Indians: "*Et que en icelle* [*terre*] *y a oranges, almendes, noix, prunes, et aultres sortes de fruictz, et en grand habundance. Et nous ont dict, les hommes et habitans d'icelle terre estre vestuz et acoustrez de peaulx, comme eulx*".

These descriptions are substantially correct. One is a little inclined to wonder how the Indians knew enough French or the French enough Indian to talk about oranges, nuts and plums—but no illumination is offered us. But with the knowledge that we have today it is not surprising to hear of "a great quantity of gold and red copper". 'Saguenay' contains all the main mining areas of present day Quebec. Centuries ago the northern and western

Indians were acquainted with copper and when Donnacona finally went to France, some of his subjects who came from 'Saguenay' gave him a copper knife. The "gold" may have been either real gold (of which the district contains considerable deposits) or copper. There was constant confusion between the two—a copper mine, for example, gave its name to Cap d'Or. So much for Indian geography in the "*Chappitre D'Aulcunz Enseignemens*". There follows a brief account of an epidemic which attacked the people at Stadacona.

This is the setting of the story which has cost Donnacona his reputation. Cartier has told us everything he has seen and learned.

Now we come to the famous paragraph of the narrative describing Donnacona's fables. We hear that a large number of Indians assembled under the command of Donnacona at Stadacona and that Cartier was suspicious of treachery. In self defence he decides that he will "*jouer finesse*" and kidnap Donnacona and the other Indian leaders. Then, apparently as an afterthought, we are given another reason for Cartier's desire to take Donnacona to France: "*Et aussi qu'il estoit bien desliberé de mener ledict seigneur Donnacona en France, pour compter et dire au Roy ce qu'il avoyt veu es pays occidentaulx des merveilles du monde; car il nous a certiffié avoyr esté à la terre du Saguenay, où il y a infiny, or, ruliz et aultres richesses, et y sont les hommes blancs, comme en France, et acoustrez de draps de laine. Plus, dict avoyr veu aultre pays, où les gens ne mengent poinct, et n'ont poinct de fondement, et ne digèrent poinct; ains font seullement eaue par la verge. Plus, dict avoyr esté en aultre pays de Picquenyans, et aultre pays où les gens n'ont que une jambe, et aultres merveilles, longues à racompter. Ledict seigneur est homme ancien, et ne cessa jamays d'aller par pays despuis sa cognoissance, tant par fleuves, ripvières, que par terre.*"

The only comments made by most historians indicate their belief that Donnacona deserves a place beside Baron von Munchausen. Charlevoix, writing his *Histoire de la Nouvelle France*, repeats the wonderful tale and ornaments it considerably: "*Donnacona, si nous en croyons la Relation du Capitaine Maloin, lui raconta que dans un voyage, qu'il avoit fait dans un Pays fort éloigné du sien, il avoit vû des Hommes, qui ne mangeoient point, & n'avoient au corps aucune issuë pour les excrémens, mais qui buvoient & urinoient: Que dans une autre Région il y en a qui n'ont qu'une jambe, une cuisse & un pied fort grand, deux mains au même bras, la taille extrêmement quarrée, la poitrine & la tête plattes, & une très-petite bouche: Que plus loin encore il avoit vû des Pigmées, & une Mer, dont l'eau est douce: enfin qu'en remontant le Saguenay, on arrive dans un Pays, où il y a des hommes habillés comme nous, lesquels demeurent dans des Villes, & ont beaucoup d'or, de rubis & de cuivre.*

. . . . . .

Il est d'ailleurs assez singulier que le conte des Hommes, qui n'ont qu'une jambe, ait été renouvellé depuis peu par une jeune Esclave de la Nation des Eskimaux, qui fut prise en 1717. & menée chez M. de Courtemanche à la Côte de Labrador, où elle étoit encore en 1720. lorsque j'arrivai à Quebec. Cette Fille voyant un jour des Pêcheurs sur le bord de la Mer, demanda s'il n'y avoit parmi nous que des Hommes faits comme ceux-là? On fut surpris de sa demande, mais on le fut encore bien davantage, quand elle eut ajouté qu'elle avoit vû dans son Pays deux Hommes d'une grandeur & d'une grosseur monstrueuses, qui rendoient leurs excrémens par la bouche, & urinoient par-

dessous l'épaule. Elle dit encore que parmi ses Compatriotes il y avoit une autre sorte d'Hommes, qui n'ont qu'une jambe, une cuisse, & un pied fort grand, deux mains au même bras, le corps large, la tête platte, de petits yeux, presque point de nez, & une très petite bouche; qu'ils étoient toujours de mauvaise humeur; qu'ils pouvoient rester sous l'eau trois quarts d'heure de suite, & que les Eskimaux s'en servoient pour pécher les débris des navires, qui faisoient naufrage à la Côte."

Charlevoix has a saving clause, Donnacona told these stories "if we are to believe the narrative of the Malouin captain", but nevertheless he proceeds to bring the confirmatory evidence of the young slave.

Modern writers have continued to regard Donnacona as a romancer. Take for example Dr. S. E. Dawson (The St. Lawrence): "Donnacona was a man past middle age, who had seen a great deal of the country, and he was addicted to telling very astonishing tales of things seen on his extensive excursions in the west, in the fabulous Saguenay region. Infinite gold and silver might be found there, with rubies and other riches. Another country he had visited where the natives never ate, and had no occasion to digest, and still another where the people have only one leg. Such facts as these related to the King of France by a potentate as important and as widely travelled as the "lord of Canada" would carry conviction and lead to future voyages. Donnacona was a victim to his own imagination for Cartier felt that he needed him in France."

Kingsford (History of Canada) gives us a like version: "During the winter passed by Cartier near Quebec, he heard some wonderful stories from Donnacona, chief of the tribe there, of a land of gold and rubies; of white men dressed in cloth; of men who lived without eating; of a race having only one leg. So Cartier kidnapped him, for he himself was a lover of the marvellous." Sir James Le Moine (Chronicles of the St. Lawrence) relates: "Cartier was told by Donnacona that there existed in a distant land (nothing like distance to lend enchantment to objects), human beings who did not eat, but seemed to live by what they drank (Neal Dow has discovered many such, even in our own country); that in another place the men had but one leg, a very large one; one arm, with two hands on it—and a variety of other peculiarities of lively interest to Professor Owen and comparative anatomy".

None of these chroniclers seem to have been struck by the fact that the marvellous Canadian races ought to have been described in quite a different part of the story. We should have expected to find the account of these odd folk in the "*Chappitre D'Aulcunz Enseignemens*". The careful composition of the balance of the narrative is enough to lead us to question the authenticity of a section so obviously misplaced. Nor do any commentators seem to have observed that the details given in the properly placed account were evidently authentic and certainly more or less correct, while the misplaced section contains very little but fiction.

For these two reasons I suggest that Donnacona is not responsible for the stories of one legged men, pigmies or "uneating folk" and that this whole paragraph is an invention of the narrative writer.

There is a third reason which is weightier still. For hundreds of years before Cartier sailed to Canada, the mariners of Europe had come back from their journeys into far lands and told tales of their experiences embellished by lively imaginations. The creatures said to have been described by Donna-

cona are to be found in earlier books. That famous and imaginative geographer, Sir John Mandeville (Jean d'Outremeuse) describes them all or beings too similar to them for coincidence.

We have uneating folk:

> "And beȝonde þeise yles þere is anoþer yle þat is clept PYTAN. The folk of þat contree ı ne tyle not ne laboure not the erthe, for þei eten no manere thing. And þei ben of gode colour ţ of faire schap after hire gretness, But the smale ben as DWERGHES, but not so lityll as ben the PIGMEYES.

We have one legged people:

> "In Ethiope ben many dyuerse folk And Ethiope is clept CUSIS. In þat contree ben folk þat han but o foot ţ þei gon so blyue þat it is meruaylle And the foot is so large þat it schadeweth all the body aȝen the sonne Whanne þei wole lye ţ reste hem.

And we have pigmies, whom Mandeville finds in China:

> "An þanne entren men aȝen in to the lond of the grete CHANE. þat ryuere goth þorgh the lond of PIGMANS, where þat the folk ben of lityll stature þat ben but .iij. span long and þei ben right faire ţ gentyll after here quantytees bothe ı the men ţ wommen. And þei maryen hem whan they ben half ȝere of age ţ geten children. And þei lyuen not but .vi. ȝeer or .vij. at the moste And he þat lyueth .viij. ȝeer men holden him þere right passynge old.

It is true that Mandeville here gives more detail as to the pigmies than is to be found in the Cartier narrative. But in this case we are not entirely dependent on the narrative. The Descelier map, made about 1550 and embodying Cartier's discoveries, shows the pigmies engaged in a battle with cranes near James Bay, and attaches the following label:

PIGMEŌS.

Cy dessus est la demōstraōn d'une peuple nōme pigmeons, gens de petite stature cōme d'une couldee. au troisieme an ilz engendrent et au 8e ils meurent non ayons devant les yeux honte justice ou honnetete pour ceste cause sont dictz brutes non hōmes. on tient qu'ilz ont guerre cōtinuelle contre les oyseaulx nōmes grues.

The map is really just as essential a record of Cartier's voyage as is the narrative, and we would be quite justified in attributing to Cartier or his scribe the information it contains. The label gives us a contemporary and

encyclopædic description of pigmies and corresponds with Mandeville's paragraph; the creatures had been written of since the days of Homer:

ἠύτε περ κλαγγὴ γεράνων πέλει οὐρανόθι πρό·
αἵ τ' ἐπεὶ οὖν χειμῶνα φύγον καὶ ἀθέσφατον ὄμβρον
κλαγγῇι ταί γε πέτονται ἐπ' Ὠκεανοῖο ῥοάων
ἀνδράσι πυγμαίοισι φόνον καὶ κῆρα φέρουσαι

Il. iii. 6.

So when the writer of the Cartier narrative spoke of pigmies, we can be quite sure that he expected his readers to know all about them and was thinking of the beings described by the label on the Descelier Map.

Sir John Mandeville did not invent all his marvels; other authors had told of them, but it is convenient to quote him as a typical travel writer of a date rather earlier than Cartier. I have cited him—with Descelier and Homer, a combination unexpected to all of them, as witnesses to prove a point—and I think it is fairly proved. All the wonders said to have been described by Donnacona, pigmies, one legged men and uneating people were part of the regular cast which performed in European travellers' tales. The writer of the Cartier story has added a few details to Mandeville's description: Charlevoix embellished the marvels a little more and thus shows us how stories grow.(1)

Cartier, we may be sure, had heard about his pigmies, one legged men and uneating folk before he ever left France. We can well imagine him and his chronicler, their feet under the long table of a St. Malo hostelry, a good fire keeping out the cold of the winter night. One after another the brass bound men roll in, one after another the landlord brings out his flagons of Burgundy and Cognac. Every mariner has his splendacious mendacities to recite, and in the days of witches and werewolves everyone is ready to believe.

There is no doubt that Cartier and his chronicler knew by heart all the stories that there were, and they might well have expected to find in Canada some of the beings so long talked of and never seen. Charlevoix's account, written some two hundred years later, can hardly be considered authentic, but it does serve to show, as does the Descelier map, that the fabulous peoples of the world, chased away from their other homes by various explorers, quickly began to mobilize around the St. Lawrence.

Donnacona might have invented creatures corresponding to one class of these imaginary beings, by some extraordinary chance he might have duplicated another class, but it is outside the bounds of possibility that he could have duplicated three. Someone was a liar, but it was not Donnacona. Incidentally, it is doubtful whether the liar was Cartier; if he had been romancing we should have found the results in the "*Chappitre d' Aulcunz Enseignemens.*"

One might venture the suggestion that one of the travellers, having heard all about pigmies and so forth, asked Donnacona whether there were

(1) Charlevoix seems to have been one of Mandeville's students. Compare the description given by the young slave with the following quotation from Mandeville's Chapter XXIII: "And in anoþer yle ben folk þat han the face all platt all pleyn withouten nese+withouten mouth, but þei han .ij. smale holes all rounde in stede of hire eyen+hire mouth is platt also withouten lippes."

any in Canada. Donnacona would almost certainly have said "mebbe so", or whatever was the then equivalent of that favourite Indian phrase of today.

To summarize my brief for the acquittal of Donnacona at the bar where he has stood for three hundred and ninety-four years will not take long.

First. The composition of Cartier's account furnishes strong internal evidence against the authenticity of the statements attributed to Donnacona.

Second. The fabulous peoples described were all commonplaces of European literature.

Third. These creatures of legend and invention were early given a home in Canada.

Fourth. Donnacona knew nothing about them and could not have invented them.

I submit that the case for the accused is complete, that the account of his romances is entirely unauthentic, and that Donnacona instead of being a liar, gave us some valuable information about the natural resources of northern Quebec which it has taken us nearly four centuries to turn to account.

* * *

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Field-Marshal Earl Haig

By

R. C. Fetherstonhaugh

IN these days of peace between the great powers of the world, when the hatred and enmity of the Great War have, at least in part, been forgotten and when, in consequence of the laying aside of bitter partizan feeling, it is possible to judge more accurately the soldiers and statesmen who directed and controlled the application of the unparalleled human forces which the Great War evoked, it is interesting, and to a British subject gratifying, to note the steadily rising position in military history granted to the man who, from noon on December 19th, 1915, until the War ended, served as Commander-in-Chief of His Majesty's forces in France and Flanders.

When the hour of the Armistice struck, at 11 o'clock on the morning of November 11th, 1918, it is not too much to say that Field-Marshal Sir Douglas Haig—Earl Haig of Bemersyde—was widely regarded as a soldier of almost secondary rank. He had commanded the Armies of the Empire throughout three years of war. His troops had fought battles as great, and in final result as conclusive, as any the world had previously witnessed. They had faced in the spring of 1918 the full fury of Germany's most desperate bid for military victory; and, though hurled back for miles, had retained their power for offensive action, changing swiftly to the attack when opportunity offered and driving the enemy, first from an area of recent conquest, in the Battle of Amiens, and then, in the Battles of Arras, the Hindenburg Line, and Cambrai, from positions stronger than had previously been known and incomparably stronger than existed elsewhere in the devastated length of the entire Western Front.

Nor had these positions been attacked in circumstances favourable to the attackers. Realizing that in the agonies of 1914-15, in the almost superhuman effort at Verdun in 1916, in the bitter fighting on the Somme, and, perhaps most disastrously of all, in the soul-destroying failure of General Nivelle's great offensive on the Aisne, the maximum power of the French Army had been exhausted; realizing equally that the maximum power of the United States Army could not be applied effectively until the summer of 1919, and not with overwhelming effect until, possibly, the year after, Germany had massed behind the scene of the British attack a concentration of divisions far more powerful than faced the gallant, but weary, French, or the ardent, but dangerously inexperienced, Americans.

Knowledge of this situation on the part of military writers and lack of knowledge regarding it on the part of readers, more particularly in France and the United States, has led to bitterness and misunderstanding. Taking for granted that the situation had become known throughout the world, the writers, with no intent to belittle the effort of the French or American

Armies, refer constantly to the fighting on the British front as the "most intense" in the Hundred Days advance; and to that on the front of our Allies and Associates as "secondary in intensity". The descriptions are accurate, when knowledge lies behind them; but to the loyal Frenchman, who remembers only the advance of France's legions against stubborn German resistance, or to the patriotic American, who recalls the drive of the United States' forces through the difficult woods of the Argonne, the comparison, though only one of degree, seems to reflect on the courage of his countrymen, to detract from the valour of their deeds, and to minimize the measure of their sacrifice.

No such reflection can be justified. The deeds of the French and American Armies in the great battles of the Hundred Days stand on their merit, and are accorded by all men of good-will and by all with knowledge of what occurred a place of honour and of glory impossible to tarnish in the age-old record of military endeavour. Full recognition of the part played so valiantly on fronts other than the British, however, serves to enhance appreciation of the British effort, and the phrase "secondary in intensity" loses all sting when it is realized that no reflection is intended. To understand how the phrase originated and why military writers use it so matter-of-factly, one should study, or glance at, for no deep study is required, a map of the Western Front issued recently by the *Canadian Defence Quarterly*, showing the position of every division of the Allied Armies, with its name or number, and the position of every German division at the time when the Armies of the Empire, the Armies of the French Republic, and the Armies of the United States of America advanced in that series of engagements which crushed completely the last resistance of the hitherto most successful military power in the world. This map, supplied for fifty cents, is so clear, so unanswerable, and so entirely convincing, that the bewilderment of military writers when the term "secondary intensity" gives offence is understandable. No simpler term, nor one more accurate, could be found to express the conditions and circumstances the map reveals.

In view of the fighting and success of the British Army in the last Hundred Days alone, without considering the great battles of 1916 and 1917, it would seem that when the Armistice brought hostilities to a close the Commander-in-Chief of Britain's Armies on the Western Front should have stood in the eyes of the world in the forefront of those who throughout the ages have led the armed forces of their countrymen in battle. That he did not, and it seems undeniable that his overwhelming part in the attainment of ultimate victory was far from established at the time, is due to a series of peculiar circumstances, which blinded the judgment of observers; and to a second series of circumstances, which, owing to his own silence and to the exigencies of the military situation throughout the previous two years, had prevented the measure of his services becoming known.

In 1918 the Allied forces advanced under the supreme command of Marshal Foch, who became a symbol of victory and whose honoured name typified success. Nothing can detract from what Marshal Foch accomplished, nor can words be found to express the gratitude due to him by the Allied peoples. He is a figure enshrined in the hearts of the people in the British homeland, in the hearts of all in the British Dominions, and throughout the length and

breadth of the United States of America, in a degree not perceptibly less than in the hearts of his own countrymen.

His services, nevertheless, tended at the moment to obscure the service rendered by Sir Douglas Haig. Foch would not have had it so; but nothing he could do or say could prevent it. History, however, without diminishing the reputation or glory that was Foch's and will remain his until the end of time, is beginning to see to it, in the inexorable way that history has, that the reputation of Sir Douglas Haig shall emerge from its temporary and, perhaps, relatively unimportant eclipse. When the shadow shall have passed entirely—and its passing may require many years—it is safe to prophesy that no commander-in-chief—not excepting Foch himself—will be seen to have earned more profoundly the gratitude of all to whom success of the Allied arms meant that life might in the future be more or less worth living.

As the French, American, and British Armies drove forward to victory in 1918, the world believed, not without foundation, that the guiding hand was that of Foch; but few realized that Foch's policy, which was to secure a good front for action in 1919, had given place to Haig's plan of smashing to victory when, as he believed, the opportunity offered, without another heart-breaking and costly year of war. Nor did the public realize that Foch held his post because, when Pétain weakened in the spring of 1918, Haig had realized that some commander, necessarily a Frenchman and necessarily a man with the indomitable courage and clear brain which he knew Foch to possess, must relieve Pétain of responsibility for decisions which treatened irreparable disaster to the Allied cause.

This point has been stressed in many accounts of 1918, but even yet the full significance of the British Commander-in-Chief's action is hardly realized. Deliberately, when he believed that Pétain was about to fail him, and Pétain's own words left no doubt that this was so, he telegraphed to London asking the Secretary of State for War and the Chief of the Imperial General Staff to come at once to France and arrange with the French Government for Foch's appointment. He knew that the French would leap at the opportunity presented, for it fulfilled a dream dear to every Frenchman's heart, and he knew that his own position in the eyes of the world must suffer severely, but he believed that the danger threatening the Allied cause was too great to permit any personal aspect to receive consideration.

When in the early winter of 1918 it had become apparent that Germany would strike in the spring with all the force she could muster, the British and French had completed arrangements for mutual support. Later it had become clear to the British Intelligence Department that the German blow would fall upon the British front at the junction of the Third and Fifth British Armies before Amiens, and Sir Douglas Haig had so notified the French Command. General Pétain, however, replied that the British must be wrong, as his own Intelligence warned him that the German attack would be launched against the French front at Rheims. In the unlikely event of his being wrong, however, he would despatch at once to support of the British the divisions ear-marked for that purpose. He could not, he added, move these divisions into positions from which support could most readily be afforded, as he was convinced that they would be needed, not on the British front, but on the front which his own Intelligence Staff indicated before Rheims.

Before the end of the first day's fighting on March 21st, Germany stood committed to a major action, during which offensive elsewhere on a large scale became every moment more unlikely; but General Pétain, wedded to belief in the attack on Rheims, could not credit the evidence placed before him and refrained from ordering the French reserves to move. At last, after the German attack had crushed in the junction of the Third and Fifth Armies, and was threatening Amiens, General Fayolle's support divisions were ordered forward, but on the evening of March 24th when the Fifth Army, waiting vainly for the support it had expected, was struggling desperately to avert disaster, General Pétain informed Sir Douglas Haig that, should German success continue, the supporting divisions, instead of coming forward, had been ordered to fall back south-west and deploy as a protection to Paris.

To Sir Douglas Haig this proved that General Pétain, despairing of effective Allied action, was prepared to divide the British and French forces, leaving the former, with the Channel behind them, and the latter, with their backs to Paris, to struggle as best they might, not for victory, for victory in such circumstances would be well-nigh impossible, but to avert overwhelming and disastrous defeat. Cohesion and co-operation of and between the British and French was a policy which Sir Douglas Haig knew Marshal Foch would recognize as vital to a satisfactory conclusion of the War; accordingly he took the steps which, within forty-eight hours, placed Foch in supreme command. The move did not at once produce reserves, for General Pétain proved not entirely amenable to Foch's orders, not, in fact, until on April 3rd, at Beauvais, a second conference of Allied soldiers and statesmen made clear to him that failure to co-operate, would be attended by most serious consequences.

With Foch in supreme command, Haig maintained his resistance before Amiens, broke the German thrust at Arras, and then faced successfully the drive of the enemy on the Lys. Co-operation between the British and French was imperfect, but the confidence in one another of the Generalissimo and the British Commander-in-Chief remained unshaken, and grew as each, realizing the other's entire trustworthiness and appreciating the other's difficulties, saw how devotedly the other was striving for the common good.

Some months later, after the enemy's attacks on the French had failed, this confidence bore fruit many fold. Sir Douglas Haig, using General Sir Henry Rawlinson's Fourth British Army and General Debeney's First French Army, turned on the enemy at Amiens and, in a battle more completely successful than the Western Front had up to this time witnessed, drove the Germans from ground captured by them in the spring, with heavy losses to them in guns and prisoners, and with a casualty list in his own forces unbelievably lighter than the magnitude of such a victory would ordinarily have permitted.

Marshal Foch was delighted, and ordered the British to continue the attack across the old, impassable battlefields of the Somme. Realizing, from the reports of his Corps Commanders, that the value of the success at Amiens would be impaired if he permitted his forces to become engulfed in the maze of the old Somme battlefields, Sir Douglas Haig suggested to Foch that the battle be not continued, but that the British strike elsewhere, where success comparable to that at Amiens might reasonably be expected. Foch listened,

failed to accept the suggestion, and emphatically ordered Sir Douglas to continue. Regretfully, but quite firmly, the British Commander-in-Chief refused to obey. It is admitted now that the refusal of Sir Douglas Haig was beyond all measure wise and advisable, but at the moment it took high courage to face the issues involved. Foch, however, was too big to call for outside aid, that is the aid of the civil power on which his own commission and that of his opponent—if such a term can be applied—finally rested. Had he appealed, he might easily have won; but he did not appeal. Instead, he fought it out, heatedly, but without rancour; and when he found that no threat, no persuasion, no argument would avail, he accepted Haig's advice and permitted the action Haig desired. A small man might have sought a petty revenge; Foch dismissed the incident promptly, and relations with the British Commander-in-Chief were as cordial as before.

That this condition prevailed was well, for Haig realized before Foch that Germany was weakening, and suggested to the Generalissimo a great series of converging attacks which would only end when Germany had been beaten to her knees. With no thought of victory in 1918, Foch had prepared his autumn campaign, involving eccentric battles along the whole Allied front, brilliantly conceived and planned to provide satisfactory jumping-off positions for a series of conclusive engagements in the spring and summer of the following year. Haig suggested that the eccentric battles be made concentric and that the Allies strive with every ounce of power they possessed for prompt and immediate victory.

The change in plan was radical and involved the abandonment, or, more accurately, the drastic modification, of the plans which Foch, with the assistance of the finest military brains in France, had drawn up and was prepared to execute. Again Foch showed faith in the man whose experience was greater than that of any soldier on the Western Front and whose decisions had so frequently brought success to the Allied cause. Haig's amendments were adopted; and Foch, directing the combined forces of the Allied and Associated Armies, drove through to the victory that has forever established his name and fame in history.

Gradually, Haig's part in the final victory is becoming known; gradually, his reputation is growing; but why gradually? one asks. What are the factors that have kept full knowledge of the success of his leadership from spreading? The answer is not easy to find, more particularly when one examines critically the list of shortcomings usually charged against him.

There is, for example, the charge that he lacked imagination. This charge is frequently levelled at British soldiers and is difficult to disprove, because it depends so entirely on what, if anything, is really meant. The French, when discussing the qualities of British leadership, usually end, or begin, with a flat statement, and then sit back as though all further discussion were needless. They imply, as between French and British military endeavour, that imagination is the factor which establishes their own leaders on a plane definitely above the less imaginative British; and Americans, quick to follow the French lead, are not disinclined to claim that they share with the French this quality in which the British, by common consent, are stated to be so lacking.

Did Haig lack imagination? Perhaps, in one sense of the word, he did. He never believed, as Nivelle believed, in a royal road to victory. Nivelle had imagination, too much imagination, one might fairly say, and imagined that the German Army could be defeated utterly in twenty-four to forty-eight hours of imaginative fighting. Haig stated that it was not possible; but Nivelle had his way; and when he failed disastrously, the Allied Governments, French and English, appalled at the extent of the calamity and at the mutiny of French divisions which followed, turned to Haig in their bitterness, as to a steady rock in a reeling world, and besought him to save them from the peril which imagination had brought thundering to their doors. In reply, Haig fought the Battle of Flanders, culminating at Passchendaele, and continued it long after hope of attaining the major objectives had vanished. It was not imaginative fighting. As General Ludendorff remarked, it was fighting in which the agony of the shell-hole area at Verdun was surpassed, but it held the German Army in an iron grip, while Pétain, who had succeeded Nivelle, restored the morale of the French Army and prepared it, after its experiment in imagination, to fight so far as possible as it had fought in the years before.

Haig did not possess imagination of the type which led Nivelle to failure, or of the type which seeks vainly to defeat a powerful opponent by a woefully inadequate ruse, but he saw before any other the opportunity for victory in 1918, and in so doing who shall deny that he employed imagination more vivid, albeit more soundly based, than is contained in all the dreams of those who deny that imagination can be coupled with his name?

It would seem that in Haig's lack of imagination of a certain type lies the secret of his not altogether happy relations with the Right Honourable David Lloyd George. Mr. Lloyd George was instrumental in 1917 in subordinating the British Commander-in-Chief to Nivelle, a man without a tithe of Haig's experience, but, though Nivelle failed and Haig, at least in part, redeemed his failure, the British Prime Minister benefited little from the experience. In 1918 he did not trust Haig's judgment and warned him, or permitted him to be warned, that the Government viewed with misgiving his plan to attack the Hindenburg Line and would hold him responsible—in other words would dismiss him—if success did not accrue. In Parliament, when the War was over, Mr. Lloyd George found words inadequate to thank Marshal Foch, but used inadequate words to express the nation's gratitude to Haig.

It has been stated freely, on authority open only to a minimum of doubt, that the personal intervention of the King alone secured for Haig and his Army Commanders the reception that London accorded them. The Prime Minister proposed a reception for Foch, with Haig riding in a subordinate position, but the King would not consent. Foch was received with every honour that King and Country could bestow; but Haig and his Commanders were accorded a reception equally significant. The attitude of the Prime Minister, however, was widely known and, as Mr. Lloyd George was at the height of his fame, it is possible that his point of view served for a time as a factor lessening Earl Haig's prestige.

Then there is the charge that Haig was too great a gentleman for the hurly-burly of modern war, was too much in the "Gentlemen of the Guards,

fire first!" class, was, in fact, the "best dressed soldier in the British Army" and not capable of the "knock 'em down—treat 'em rough—kick 'em in the belly" attitude needed to hammer a doughty enemy to his knees.

Haig knocked 'em down and treated 'em rough—if you doubt it, ask the Germans who faced his battalions at the Somme, at Passchendæle, at Vimy Ridge, or in the battles of 1918—but it is possible that at kicking 'em in the belly he was not at his best. In other words, for in view of the savage fighting on the British front no alternate meaning can apply, he did not deliberately bomb the enemy's hospitals, infect his water supply, or slaughter in cold blood his prisoners of war. It may be that in this matter the Commander-in-Chief of the Armies of the Empire was remiss. Certainly some critics of his leadership would so seem to imply. Earl Haig of Bemersyde, however, has already taken his case to a tribunal from Whose judgment there is no appeal. It is not impossible that before that Tribunal his failure to kick 'em in the belly has been condoned, even justified.

In a short article of this nature, one can not pick out all the charges against the quality of Haig's leadership and deal with each in the light of evidence now available. Volumes would be required, and little in the end would be gained. Indeed, the purpose of the article was not to attempt such examination, but merely to point out, with a few reasons, why the reputation of the British Commander-in-Chief was growing as the steady flow of evidence permits a fuller comprehension of his accomplishment.

With a chivalry reflecting honour on all concerned, the *American Legion Monthly* recently published an article in which the following appreciation of Earl Haig appeared: "More than ten years afterward, Haig remains the least advertised general of the World War—and the least fully appreciated. In part, he himself is responsible, for it was not his way to crowd into the spotlight, but, in addition, his fame has suffered from two or three historical misconceptions". Continuing, the article gives the details of Foch's appointment to the supreme command and relates, amongst other incidents, how Haig planned the converging battles which led to ultimate success. In reprinting the article in the October 15th number, *MacLean's Magazine* observes: "Truly a prophet must go out of his own country for honour."

It is an old belief, and justified by the experience of time, but there is hope, if recent indications can be trusted, that Haig, in his own country—the British Empire—will one day receive in full measure the honour and credit that are his due.

Pierre Rocques

A fragment from the French of Théo. Jongers. Éditions Argo. Paris.

By

Sir Andrew Macphail

(Pierre Rocques, a rich farmer, found himself alone; his son had left him in hatred; his wife, in despair; he was forsaken by his mistress, despised by his neighbours, and insulted by the young).

He took down a lantern that always hung by his bed; he lit the lantern, and went down stairs. As soon as he appeared in the farmyard, Moustache, the guardian of the night, leaped up with joyous barking.

"Go, and lie down," the farmer said in a harsh voice. Then, with a sudden change of mind, he continued in a tone that was almost a caress, "Very well; let us go and make our rounds for the last time."

Every night for thirty years, Pierre Rocques with a lantern in his hand, made a general inspection of the farm buildings; and during those years the dog that followed him had changed four or five times.

This one, Moustache, a big, gray, rough-haired drover's dog, was young and eager for the work he knew so well and remembered to the least detail. After the rather rough welcome of his master, the dog ran ahead straight to the cow-stable, where he awaited the farmer, and wagged his stump of a tail. As soon as the door was opened, he hurled himself like a bomb to the furthest end.

The cows were accustomed to these nightly visits; and lying at ease on their flat beds went on chewing their cud without the least emotion.

In the breeding-stable, and in the stable where the bulls were kept, the farmer and his dog were received with the same calm; it was only from the pig-pen that a few ill-humoured grunts were heard.

In passing before the barn, Pierre raised his lantern to see if anything unusual was going on, and Moustache leapt into the straw, always hoping to surprise a conference of cats.

At the hen-house the man merely paused, but the dog sniffed the air minutely, for he knew very well that the enemies which sought that place were the most to be feared,—they are so small and so patient.

Upon the sheep-fold a passing glance was enough; the shepherd and his dogs were lying there, and nothing was to be suspected in that quarter.

The horse-stable, the last station, demanded careful scrutiny, for horses are the most expensive of animals; they are nervous, and accidents to them are the most frequent.

When Pierre Rocques had come to the end of his round, he tied up Moustache who usually spent the night in freedom, and went into the wagon-shed. Very soon he returned, carrying a packing-case and a length of rope.

"That is all I need," he said, as he went into the horse-stable again; "and if the iron hook holds fast,—that will soon be the end."

In front of an empty stall he set down the lantern; then climbing on the box, he unhooked one of the breechings, and fastened the rope securely to the empty hook.

"This ought to bear at least ten times my weight," he said, as he tested the rope for a moment. "Ah, well; when I put on this noose, I shall have nothing to do but lean to one side and shove the box away."

At that very moment, one of the horses began to whinny and paw nervously on the floor.

"Whoa there; you beast!" the farmer, overcome by instinct, could not help crying out, in spite of his ominous preparations; and casting his eye on the two rows of horses, he saw twenty pairs of eyes levelled upon him.

"*Bon sang de bon Dieu*," he swore, as he clambered down quickly from the box. "If I do not hide the lantern, they will not let me hang in peace."

But he did nothing to the light; he let himself fall on a pile of straw; for a long time he remained motionless, his head supported in his hands.

"I have not yet lost my head," he muttered. "One would think they knew. From the first, the cows looked at me like that; and the dog too, when I tied him up; and it is not only the animals that seem to understand, but the whole farm, the doors, the windows, the platforms, the tools, and even the manure. Is it perhaps because I was afraid, that such an idea came into my mind? No, I am not afraid. What then? It is hard to do this thing here, where so many of the old Rocques toiled. What an end for the Rocques! But now that I have considered the matter, I do not like them to see me in the morning with my tongue out, hanging at the end of a rope, in this very stable where my forbears knew every stone. After all, since I have decided to put an end to myself, I can well afford to wait one day more."

Having arrived at this decision, Maître Rocques got up, put away the rope and the box, untied Moustache, and went to bed.

Night-Fall: Luxor

I.

Night fell on old Luxor:
Then, o'er the desert, darkness swiftly crept,
And filled the distant valleys, where there slept
The spirits of a hundred Theban kings,
Whilst, save the rustle of the night-wind's wings
Through those vast temple halls and colonnades,
As if the ancient gods held court with shades,
No sound broke o'er the scene.

II.

All nature, hushed in awe
Before the splendour of the dying day,
Lay silent, and below swept on its way
The Nile. E'en as I watched, the light had flown
The zenith's boundless spaces: then were sown
With countless stars the sapphire depths of night,
Whilst oceans of transparent amber light
Flowed down the western sky.

III.

Above the Libyan hills
Some clouds hung flaming 'midst a blood-red glow;
Then fell on all the silent plain below
A silence more intense. Infinite space!
Infinite worlds of light! I hid my face,
And bowed my head, o'erwhelmed with such a flood
Of thoughts, too vast for finite minds: I could
But wonder what is man.

IV.

I leaned my arm against
A column of stupendous size, beside
Whose bulk a mote I seemed. In all their pride
The massive ruins seemed to say to me,
"Ye pass; but we, in our immensity,
"Live on eternal as the hills, which gave
"Us birth, and as the Nile, whose waters lave
"Our base, immutable."

V.

It seemed that men were naught
But tiny insects, crawling, till they died
And crumbled into dust. Just then I spied
A star supremely bright, and swiftly sped
My thoughts o'er countless million miles of dread,
World-peopled Space to ask, if, there, are men
With minds like our's, who build great temples; then
Stand wondering at themselves.

VI.

By thought I flew through Space,
And trod the outer spheres. I saw that man
Could ne'er be measured by the cubit's span,
Nor weighed like stone; for he is god-like, vast,
Whose will-power raised these temples of the past,
Who understands the movements of the throng
Of Heaven, and measures Space; this flame of strong,
Undying energy.

VII.

I looked around again
At those stupendous ruins of Luxor,
And spake my answer back: "Ye were no more
"Than shapeless stone till man created ye
"In his imagining, and painfully
"Subjected nature's powers to his will
"Till ye from out o' the bowels of your hill
"Were carved, and made yourselves.

VIII.

"We pass; but ye stay here
"Unmoving, senseless, dead, in slow decay.
"Ye truly spake: we pass, but on our way
"To solemn portals, some call Death, where all
"That chains us to this Earth aside shall fall,
"And we shall stand, and know as we are known,
"Be free to wander, where our thoughts had flown,
"Creation's furthest realms.

IX.

"E'en now, with flesh-veiled sight,
"We thrill responsive to our Father's Mind
"Who wrought the sunset's glow, and we shall find
"Undreamed-of glories, when we grow as He
"Would have us grow, in endless harmony—"
Thoughts came too fast for words; but I had said
Enough, and, through the darkness with my head
Erect, passed on my way.

R. R. T.

Sonkwala

O Sonkwala Mountain
Stretch out your arms;
Lift me high to your shoulders,
And teach me spells and charms.

I would build a white house there
Like a jewel fine and small;
With the door to open straight
Upon nothing at all.

Hanging over the cliff,
With a thousand feet to go;
And the bright coloured forest
Like a carpet below.

And a clear mountain stream
Past the house should haste away,
Falling down the valley
In a whisper of spray.

The door shall stand open
All night long without bars,
And the hearth burn clear and bright
In salute to the stars.

I'll spread a white cloth smoothly,
And brew coffee on the coals;
Set out fragrant yellow corn-bread,
And brown honey in bowls.

And early each evening,
My friends will softly come
O'er the basil-strewn threshold,
And greet me in my home.

In the glow of the hearth
They will meet, a quiet throng,
And their voices rise and fall
Like the ghost of a song.

(Dead friends and living,
They sit there side by side;
For those well remembered
Are not lost, have not died.)

And in the pleasant pauses
Sounds the waterfall's roar
And the stars in order rising
Go stately past the door.

The sweetest of women
The feast forth shall share
With the fire's rosy light
On her cheeks and her hair.

And the lads I went with once
Now gone these many days,
I shall hear them and see them
Stretched basking in the blaze.

Not a meeting of ghosts,
Pale, and timid and cold;
But lusty and loving,
And real as of old.

But the green light of dawn
Wakes the bush fowls below;
And my friends rise and clasp hands
And unhastily go.

See! Far down the hillside,
A flash of white and grey:
A troop of little monkeys
In the treetops at play.

There a crimson-winged clock-bird
Glows in the rising sun,
And the doves' calls grow louder
With another day begun.

Through every open window
Pours the apricot light;
And I heartily sweep up
The ashes of last night.

For I know that when the sunlight
Slants red across the plain,
At dusk in the mountains
I shall see my friends again.

—J. W. B. H.

Notes

The League in the University

Canada's place in international affairs is still comparatively new and small, though well established. Her importance will increase with the spread of such novelties as one recently introduced into the matriculation examinations in British Columbia. Here, for the first time, was set in the History paper a compulsory question on the League of Nations, based on a small book on this subject issued free to all candidates for the University. The answers, we are told, showed a very fair knowledge of the story and working of the League, and in particular, Canada's part in both. But even if the knowledge had been scanty, the interest of the students, not to mention the enterprise of the university authorities in introducing this type of study, would be gratifying.

The universities, above all else, are the medium through which our international responsibilities and undertakings can become clear to Canadians. In business, politics and the professions, one may or may not be brought closely into touch with other peoples and nations. But it is only in the comparative leisure of college where there is time to think if we wish to use it for that, that we can train a body of men and women who are in the best sense internationally minded.

* * *

Benefactors of Education

Not long ago, five months in fact, certain people interested in Brandon College, Manitoba, made up their minds that the College, a small institution catering chiefly to local educational needs, should either be put on to a fairly independent footing or should go out of business altogether—and immediate steps were taken to decide between these fates.

The results as published in the papers during the last week of August are an encouraging sign of the call that education can still make on public-spirited men. Messrs. Cyrus S. Eaton of Cleveland, Ohio; A. E. Mackenzie of Brandon, and G. C. Edwards, M.P., Ottawa, between them with $350,000, $250,000, and $100,000, respectively, met the appeal of the College in which they were interested from different points of view with splendid openhandedness, and aided by two gifts of $50,000 each from two unnamed Winnipeg donors, saved for Manitoba and Canada a valuable institution.

The swift and generous response of these men restores a faith which one often hears denied. There is scarcely anything that gets so much criticism in this country as our education—primary, secondary and University—and there is scarcely anything in which lack of funds is so conspicuous and so shackling. If example means anything, that set by these benefactors of Brandon College must come as a refreshing cheer to those engaged not only in the work, but in the laborious work of finding the funds for education.

Canada and the United States

The extraordinary enthusiasm, amounting to frenzy, that surrounded the visit of Mr. Ramsay Macdonald both to the United States and to Canada, was no doubt in large part the artificial inspiration of the newspapers and other publicity agencies. But a certain proportion of it was perfectly sincere. All of it was grounded in the strong emotion in favour of peace that prevails for the time being.

But for Canada the episode had a political reality as well. The essence of Mr. Macdonald's visit was to try to give some substance to the friendly feelings for the United States that exist in England in spite of evidence to the contrary. And friendliness to the United States is a Canadian policy. It is sane and practical and is bound closely up with our national security. However uneasily we may sit with the American in harness, he, better than anyone else, can grasp our external problems on the Pacific, in Europe, and elsewhere either because he is very often party to them—industrially or commercially—or because his problems in those quarters are very similar to ours.

Washington understands where Downing Street needs to have the why and wherefore laboriously explained—as Sir Auckland Geddes once pointed out when he was better known than he is now. So that it is perfectly natural, not at all disloyal, and wholly desirable that Canada should acclaim the honest effort of a Labour Prime Minister to co-operate with the United States in the most important task in the world. "From now on the problem of the Dominions, and with it that of the whole British Empire, is that no policy embracing an anti-American point of view will ever be accepted by such great partners as Canada and Australia." So Mr. André Siegfried, writing in 1927. The conclusion to the matter would seem to be that the more closely identified are American and British efforts for peace the better for everyone, Canada included.

* * *

Mr. Macdonald's Radicalism

There was an interesting by-product to be observed in the general curiosity about Mr. Ramsay Macdonald. He was known, loosely, as a Socialist and feared, naturally, as such. Yet his personal appearance, voice, diction, and apparently his ideas, were quite respectable and even—if they were all they appeared to be—acceptable.

But where was his redness, his radicalism? Its absence disappointed some, soothed some, worried others. The phenomenon has been explained in various ways. The rarest was that Mr. Macdonald's mission was not only the most radical thing afloat today, but was also profoundly and internationally Socialistic. There has never been a private privilege more cherished, more tenaciously gripped than the right to fight. Yet to serve society, which is one of the guiding principles, we believe, of Socialism, Mr. Macdonald came over to urge Mr. Hoover to help in the general work of internationalizing that right; in other words, of controlling it through society and in its name. In short, the British Prime Minister was engaged in a socialistic errand that transcended the lesser considerations—for the time being—of freedom of speech, national control of resources, etc.

Culture in the "Dull and Deadly"

In our last issue we published an article on "Culture in the Wild and Woolly West" by Mr. A. Key, which has, we believe, given impetus to a discussion of which we do not have any too much in Canada. Not many weeks ago the National Council of Education held a large and, as we say, a "representative" meeting in Montreal, centred about Sir Barry Jackson, to discuss the beginning of a Little Theatre movement in that city. In the general remarks that followed the main speech of the evening, something of the indignation that occasionally overcomes Montrealers at the intellectual and artistic paralysis of their metropolis was given voice, and there was good evidence that we may be reaching the point when suffering indignation may actually lead to "something being done."

The fact is that those who could develop music or art or drama by listening, buying or attending, or by performing, creating or acting, are too poor or too overworked to break through the thick crust of the Philistines; and those who have the money and time are the Philistines. In the meantime Montreal grows in apartment houses, duplex flats, electric wiring and water pipes: it quenches the thirst of the tourist and is preparing to make travelling by the Canadian National Railways more comfortable by building a new and vaster station. Yet at the meeting of the National Council of Education in question, Miss Martha Allan, well known for her interest in the drama, was able to say, after a careful check-up all over Montreal, that to her knowledge at that moment throughout the city of over a million people there was only one dramatic performance in progress anywhere, and that of a small and quite unassuming amateur club in one of the outlying parts of the city.

Such conditions are quite familiar to Montrealers. So, too, are the conditions that create them. And both give rise to a startling amount of cynicism amongst those many to whom the arts are really a pleasure. But it is deeply to the credit of the National Council of Education that it has brought the matter to light so dramatically. Practical steps were taken at the meeting towards putting into effect the plans and ideas just brought out; if they go any farther than the committee stage a new complexion will have been given to this kind of effort and we shall be fully justified in looking for a real improvement. Let us hope the familiar fate of death from inanition will be spared this latest attempt to found a Little Theatre movement.

* * *

THE following is an interesting page from the earlier history of McGill University. It is often said today that now Canadians have denied themselves the right or privilege of receiving titles from His Majesty the King, the only remaining means whereby distinguished citizens of the Dominion can get the recognition that they deserve is through the University which at least can confer an LL.D. on our prominent men of business and politics. In the simpler days of 1871 this power was evidently viewed by some in a different light.

MONTREAL, DECEMBER, 1929

The original of this manifesto is in the McCord National Museum of McGill University.

To

THE GOVERNORS OF THE McGILL UNIVERSITY

The Memorial of the undersigned graduates of the Faculty of Arts of the said University.

Respectfully represents,

That in the opinion of your memorialists the conferring of Honorary Degrees tends to diminish the attachment of graduates to their University and lessens the interest they feel in their progress and welfare, besides depreciating the value set by the public, upon their degrees, the evidences of the time occupied in obtaining a systematic college training.

That the University of Toronto confers no Honorary Degrees and that thus the value of the degrees given by the McGill University, the leading University of the Province of Quebec will compare unfavourably with those of the University of Toronto.

Wherefore your memorialists respectfully pray that you be pleased to take these premises into your favourable consideration, and adopt such proceedings as will preclude the conferring in the future of any Honorary Degrees by this University.

And your memorialists as in duty bound etc. etc.

Montreal 28 March, 1871.

DAVID R. McCORD M. A., B. C. L.
N. W. TRENHOLME M. A.
LEMUEL CUSHING M. A.
LEO. H. DAVIDSON. M. A., B. C. L.
F. E. GILMAN M. A., B. C. L.
R. J. WICKSTEED B. A., B. C. L.
F. S. LYMAN B. A., B. C. L.
C. P. DAVIDSON M. A., B. C. L.
L. A. HART, M. A., B. C. L.
ARTHUR A. BROWNE B. A.
JNO. S. FERGUSON B. A.
S. P. ROBINS M. A.
J. S. ARCHIBALD B. A., B. C. L.
JOSEPH GREEN M. A.
E. B. GREENSHIELDS B. A.
MEREDITH B. BETHUNE M. A., B. C. L.
WALTER McQUAT B. A.
W. deM. MARLER B. A.
HENRY C. SCOTT B. A.
FRANK O. WOOD B. A.
J. A. PERKINS Jr. M. A., B. C. L.
WM. E. BULLOCK
GEORGE W. MAJOR B. A.
GEO ROSS M. A., M. D.
IVAN WOTHERSPOON M. A.
CHARLES GIBB B. A.
J. R. DOUGALL M. A.
WM. BREWSTER Jr. B. A.
DUNBAR BROWNE M. A., B. C. L.
WALLACE CLARKE B. A.
ALEX ROBERTSON B. A.
S. E. TABB, M. A., M. D.
CLARENCE J. H. CHIPMAN B. A., M. D.
ALEX S. BARNSTON B. A.
JOHN MORRISON M. A.
A. D. BLACKADER B. A.
JOHN ROBERT McLAREN M. A., B. C. L.
R. A. RAMSAY M. A., B. C. L.

Note added: The above memorial may be considered as the unanimous expression of opinion of the Graduates in Arts, in the city of Montreal, of whom there are forty-five and thirty-eight have signed as above—and the signatures of the others could be obtained if time permitted—only one graduate declined.

Books

*Archibald Lampman**

DR. CONNOR'S little volume on the minor poet Lampman is a most interesting mirror of the limitations still resting on literature in Canada—for it is idle to talk of Canadian Literature. Both the author, Dr. Connor, and the poet are filled with desires to write, and neither of them quite pull it off. In fact, as Dr. Connor says of Lampman, they have "plenty of ideas, but lack background."

As a biographical sketch, therefore, this will be useful for future students of the early struggles of writers in this country: for Lampman took his poetry seriously and strove desperately hard to do good work and to rise superior to the shackles of a mediocre education—the only kind his country could give him. He also chafed, as who will not, at the vacuum in which a man of letters, pure and simple, has to work in Canada? Various "critics," of course, wrote wordily about his phrases and his insight, and his pure liquid note, and so on; but "critics," innocent of the critical faculty, are apt to do that and a poet knows how little it all means. Meanwhile Lampman, tied to a miserable wage, a weak body, and a soul-destroying job, simply beat his wings out at a window he could not open. He had no "background," as Dr. Connor calls education: he had no experience of life—his desire to shoot impossible rapids in a canoe are pathetic—he had no money: he had no force of personality: he did not have a man-sized job—its only attraction was its security apparently. We are not even told that he ever got respectably drunk.

Whatever poetic powers lay dormant in the poor struggling Lampman were kept effectively crushed and inert beneath this "beggeraly account of empty boxes," and if Dr. Connor's book has no other merit, it has made this fact clear. So far it would appear Canadian poets are still-born, not made.

*"Archibald Lampman: Canadian Poet of Nature" by CARL T. CONNOR, PH.D. Louis Carrier & Co. at the Mercury.

* * *

*The Stories Streets of Quebec**

THIS is a very consciously hearty little volume about four by five inches, but nevertheless a useful and chatty companion for the tourist, or even the Quebecker who does not know his oldest and most picturesque city. Perhaps this picturesque note is being a little overdone, like the carefully preserved native haunts (Volendam, for example) in Holland. But there is no doubt whatever about the historical atmosphere of Quebec. Every corner and slope has a real hint of the past clinging to it, if only we can see it. Mr. Davies' text and Mr. Pilot's slightly vague sketches are quite successful in letting us see it.

Perhaps the most attractive thing in an attractive book is the panoramic imaginative map of Quebec City at the end.

*The Storied Streets of Quebec: by Blodwen Davies: Ill. by Robert Pilot, Louis Carrier & Co. at the Mercury.



THE GEST CHINESE RESEARCH LIBRARY, McGILL UNIVERSITY

On the mezzanine floor appears a Chinese encyclopaedia containing five times as much reading matter as the Encyclopaedia Britannica

Football in China Two Thousand Years Ago

Contributed by DR. ROBERT DE RÉSILLAC-ROESE

ACCORDING to Chinese historians, football made its appearance in China in the third and fourth century before our era, as a means of training soldiers and of putting their endurance to test.

Football, called in Chinese *ts'u chü*, is repeatedly mentioned in that history of the Former Han Dynasty (B.C. 206-A.D. 25), the *Ch'ien Han shu*, by *Pan Ku*, who died A.D. 92. *Yen Shih-ku* (579-645), the noted commentator on this work, gives an explanation of *ts'u chü*, namely: "*Ts'u* is to kick with the foot; *chü*, the ball, is made of stuffed leather and is kicked about for amusement."

The Emperor *Ch'êng Ti* (B.C. 32-6), of the Former Han Dynasty, was fond of football, but his officers remonstrated with him, saying that it was physically exhausting and also unsuitable to the imperial dignity;

(*Continued on page 43*)

Advising the National Government of China

By DR. J. A. L. WADDELL (Sci. '82),

RECENTLY, I promised to write an article for *The McGill News*, telling of my work in China as Chief Technical Advisor to the Ministry of Railways.

Upon arrival here on January 26th, 1929, I quickly settled down in Shanghai, and I have been constantly busy ever since. I have made two trips into the interior; and a few days hence I shall start on another for the purpose of inspecting the bridges on three lines covering the railway system of the Province of Shantung.

At Hankow I am now making a contour survey of a double-track railroad line to connect the Peping-Hankow Railway on the north with the Canton-Hankow (unfinished) Railway on the south; including a railway bridge and a highway bridge over the Han River, and a combined railway-and-highway bridge over the

Yangtse River, with the necessary approaches to all three. After the high water goes down in November, or December, I shall make borings at the three crossings, in order to locate the bedrock. After all the information is collected, I shall prepare final layouts of structures, a final location of the connecting railways in the three cities (Hankow, Hanyang, and Wuchang), and a total estimate of cost for the entire construction.

Another task that I have been working on is a survey, a design, and an estimate of cost for a new single-track railroad bridge over the Yellow River, on a proposed short cut-off line of the Peping-Hankow Railway. This job (which was the cause of my call to Peping eight years ago) will involve interesting experiments on the carrying capacities of long piles sunk by water jets—both singly and in a group of eight. One result of the experiments will be to settle the as yet unsolved question: "If one pile will carry *t* tons, what will a group of *n* similar piles under like conditions carry?" Some engineers think that the answer will exceed *nt*, but most of them think it will be less. The cost of the structure, and possibly even its layout of spans, will depend upon the result of this investigation.

In this connection there is another difficult and important problem to solve, involving questions of economy and river conservancy. The Crossing is about one and three-quarters miles wide, but the river is much narrower than this at other places; hence it is on the tapis to narrow it down and reduce the total length of bridge by means of a dyke and an embankment. The more the river is narrowed, the greater will be the cost of the narrowing and the deeper will be the scour, but the less expensive will be the bridge; consequently there is one width that is better and more economic than any other—and what that is I have to ascertain.

When we were on our way to Peping, I had intended to cut off our private car at this crossing for twenty-four hours to study the situation on the ground; but we found troops of the rebel general (Feng) entrenched on both banks of the river, so we passed along to Peping, for I knew that, if we stopped, our car would be commandeered and its occupants turned adrift. I had just been having a meander and hydrographical survey made o the stream, and my party was fortunate to finish this before the soldiers seriously interfered. The troops have lately left the bridge site and I have resumed operations.

Another of my tasks is the inspection of the bridges of the Peping-Hankow Railway (1,411 spans in all) to determine whether to strengthen or remove them—also how to use the discarded metal. About one third of this inspection was completed when we had to stop work because of impending war and the destruction of a portion of the railway by rebels. I have just lately resumed this inspection.

Another construction on which I am engaged is a bridge-manufacturing shop at Hankow. Plans are being prepared in my New York office, and before long bids will be called for on its construction and equipment. It is the intention to use this shop, which will have an annual capacity of ten thousand tons, for the manufacture of plate-girder spans and short, riveted-truss spans, also for the re-vamping of old railway-bridge metal for highway structures.

Finally, as part of my official duties, I have taken over the reconstruction of the course in Civil Engineering in Nanyang University at Shanghai; and I have spent a large portion of the summer months on this task, finishing it a short time ago. For some months I had been making preparations for doing this work, mainly by collecting the best literature on the various branches of civil engineering.

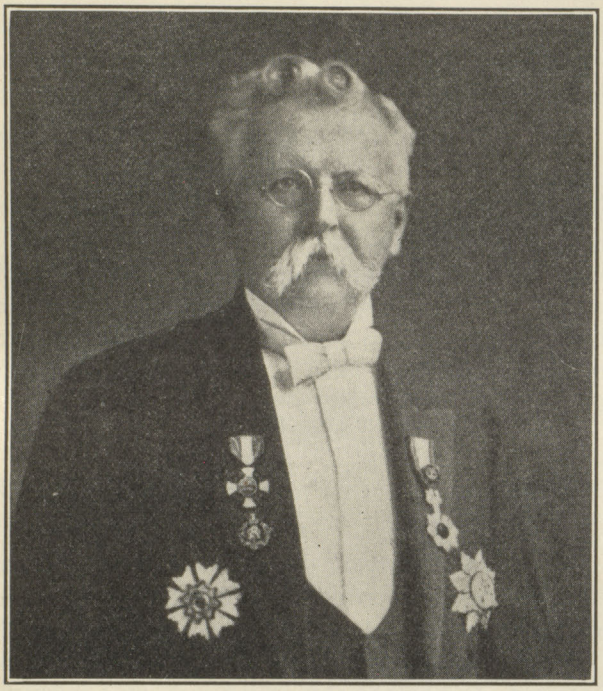
It is my firm opinion that, after China recovers from her present military troubles, no country in the world will offer such fine opportunities for business. The existing railroads of the country are in bad condition and will require millions of dollars to be spent on them for ties, rails, locomotives and cars, and a large mileage of new railroads is now contemplated and even being surveyed. Again, there will be needed, as soon as practicable, thousands of miles of highway (mostly macadamized), for which machinery and tools will be required, and harbours, water-works, manufacturing shops, municipal improvements, etc., are in contemplation.

All these improvements will call for more money than China can raise at home, hence she must borrow abroad and, as the United States now controls the bulk of the world's capital, the Chinese will look to America for financial assistance. It is my opinion that within the next twelve months the National Government will so improve conditions in China that investment here, with every prospect of a large and satisfactory return, will be safe. When such is a *fait accompli*, the demand for materials and machinery from abroad will be stupendous.

I am of the opinion that every thinking man, both here and abroad, should back the present Government in its struggle to bring peace and prosperity out of the chaos and misery that have existed in China for fully eight years. Many people criticise the Government, but no one outside of China (or hardly anyone in it) can recognize how stupendous is the task that has been undertaken. There have been several governments in China since the overthrow of the Manchus, and this is by far the best of them all—in fact, it seems to be the only one that has really been acting for the country's welfare instead of for personal or party aggrandizement.

Personals

The *News* welcomes from graduates press clippings with details of appointments and other activities. These should be addressed to H. R. Morgan, Esq., c/o The Brockville "Recorder," Brockville, Ont., or to The Executive Secretary, Graduates' Society, McGill University, Montreal.



DR. J. A. L. WADDELL, Sci. '82

An article on his work as Engineering Adviser to the Chinese Government appears in this issue of the *News*.

Dr. J. Arthur Gallant (Med. '28) has been appointed Assistant in Medicine at the Medical College of Virginia, Richmond, Va.

Capt. William H. Murphy (Sci. '11, M.Sc. '15), United States Army, is Commanding Officer at the Signal Corps Laboratories, Fort Monmouth, N.J.

R. S. Lea (Sci. '90, Ma.E. '93) and W. S. Lea (Sci. '08) were in Winnipeg this autumn, the former as Consultant on the Seven Sisters Falls development of the Northwestern Power Co., and the latter on the Slave Falls development of the City of Winnipeg Hydro-Electric System, of which J. G. Glassco (Sci. '00) is General Manager.

In July of this year, the President of the United States of America, over the signature of the Secretary of War, awarded the American Distinguished Service Cross to Lieut. W. J. A. Macdonald, U.S. Army, son of Dr. Alexander Macdonald (Med. '83) of Chatfield, Minn. Lieut. Macdonald was killed in action in 1918, and the decoration was formally presented to his parents at Fort Snelling on October 1st, 1929.

A. W. Lochead (Arts '01) is now pastor of the United Church, Dauphin, Man. Dauphin Presbytery is still extensive, though, by the establishment of Hudson's Bay Presbytery on October 3rd, 1929, some 600 miles along the northern railways have been cut off.

Dr. J. B. Maudsley (Sci. '21) has resigned from the Canadian Geological Survey, Ottawa, and has been appointed head of the Department of Geology in the University of Saskatchewan.

W. H. Moore (Sci. '27), who for some time served with Dominion Explorers, Ltd., has returned from the north country and is at McGill demonstrating in the Physics Department.

Dr. H. S. Birkett (Med. '86) has been elected a member of the "International Collegium Oto-Rhino-Laryngologicum"; and has also been appointed Vice-President of the Section of the British Medical Association devoted to study of the nose, throat, and ears. Membership in the "International Collegium" is limited to 10 from each country of the world. Dr. Birkett is the only member from Canada.

W. Durie McLennan (Arch. '14), formerly Executive Secretary of the Graduates' Society, has joined the staff of Walter Molson & Co., Real Estate and Financial Agents, Montreal.

The Principal, on November 14th, received from Commander Richard Byrd, of the American Antarctic Expedition, a radiogram warmly commending Frank T. Davies, of the Physics Department of the University, for his services with the expedition.

J. P. Rixford, Sci. '64, has retired from the Bureau of Plant Industry, San Francisco. His work and hobby has been the introduction into the United States of profitable fruits and vegetables from foreign lands.

Dr. Jacob Viner, Arts '14, Professor of Economics at the University of Chicago, was a speaker at the annual gathering of the Institute of Politics, Williamstown, Mass.

Iveson A. Miller, M.Sc., Arts '13, and George W. Bourke, Arts '17, are now assistant actuaries in the Sun Life Assurance Co., Montreal. Both are Fellows of the Actuarial Society of America and Associates of the Institute of Actuaries of Great Britain. The former has been with the Sun Life since 1915; and the latter since 1919, when he returned from overseas.

Rev. R. K. Naylor, Arts '06, lecturer in theology in the Montreal Diocesan Theological College, has been promoted to the chair of New Testament Literature.

Major G. A. Stuart Ramsey, Arts '08, Med. '12, has been appointed lieutenant-colonel in command of No. 24 Cavalry Field Ambulance, C.A.M.C., Montreal.

W. E. Dunton, past student, and J. B. Rutherford, Comm. '21, have dissolved their partnership as chartered accountants in Montreal. Mr. Rutherford is carrying on the business, and Mr. Dunton has joined Hodgson Bros. & Co., Limited, investment bankers, Montreal, which will be known as Hodgson Bros. & Dunton. He is also a partner in the firm of Hodgson, Jarvis & Co., members of the Montreal Stock Exchange.

Dr. Seymour Hadwen, Vet.' 02, research professor of animal diseases at the University of Saskatchewan, has been appointed director of veterinary science for the Ontario Research Foundation, Toronto.

Vernon C. Dawson, Agr. '28, has been awarded a colonial scholarship in Economics by the British Government, tenable for a year at Oxford. Upon the completion of his studies, he will join the British Colonial Civil Service.

(*Continued on page 32*)

Etienne Samuel Bieler

(*Continued from page 18*)

Mr. Broughton Edge, Director of the Australian Geophysical Survey:

. . . "Bieler joined us in July of last year, and within a few days we all realized what a source of strength had been added to our Survey. His ability and energy won the admiration of everyone with whom he came in contact, and our admiration soon became coupled with real affection—for it is seldom that one meets a man of such sincerity of purpose and with so charming a manner. As Deputy Director of our Survey, Bieler was concerned with all aspects of the work, and during the past six months, whilst I have been away, he took over my duties and displayed the most admirable judgment and resource in dealing with the numerous difficulties, which arose from time to time and are inevitable in a new undertaking of this kind. During this period he was largely occupied in administrative work, and in travelling the great distances which separate our field parties, but, in spite of this, he managed to continue with the electrical investigations which he commenced last year. We had learned to rely on him in many ways, but particularly so where theoretical considerations were concerned. Now that his guiding hand is withdrawn, I fear that our work will suffer severely. However, the effects of his death extend beyond the particular interests of our Australian survey, for his loss to science in general is a more serious matter by far". . .

Extract from the address, delivered in French, by Pastor Georges Peck, Montreal:

. . . The traits of Etienne Bieler's character which I have cited, the purity of his life and his honest and persevering search after truth, would not make a complete picture if I did not speak of his earnest and unselfish attitude in connection with his church. His regular presence, the heartiness of his responses and of his singing, the devotion of his services as a member of our Board, the generosity of his gifts to our cause, were a constant encouragement to us. So long as, at Bethany, there shall remain one member who knew him, that person will remember his influence and example". . .

Address: General Sir Arthur Currie, Principal of McGill University:

. . . "Although cut down in its prime, I, for one, believe that his life had come full circle whatever the tale of his years, and that somewhere in the Divine scheme of things there is compensation for the achievements that undoubtedly would have been his, and for the experiences he would have turned to good account.

"I was drawn to him first when I recognized in him a comrade in the great adventure. When I came to know more about him, to learn of his gentleness, his kindly nature, his love of the good and the beautiful, his attachment to his home and his family, I realized that he, for one, had not been dazzled, even momentarily, by what some may call the glamour of war, that it was only his strong sense of duty, his just appreciation of the issues involved, for he had a mind above his fellows and could detect those issues clearly, his hatred of shams and hypocrisies, his sense of what was at stake that led him to enlist when freedom's trumpet called her sons to battle". . .

Address: Dean Ira A. Mackay, Faculty of Arts, McGill University:

. . . "The mortal life of Etienne Bieler was itself visible proof of a life to come. His life was clean, beautiful, and unwordly. One need only to have met him to realize that no bitterness, nor hate, nor selfishness, nor meanness of any kind were in his life. Where then can death come in? If the soul be not diseased, how can it die? Noble minds in all ages have believed in a life to come; they would not have been noble minds if they had not". . .

Address: Dr. A. S. Eve, F.R.S., Director, Department of Physics, McGill University:

. . . "I will not now speak of his eminent contributions to knowledge, but I would point out a remarkable coincidence, namely, that Dr. Bieler's work especially led him to investigations of what may fairly be termed the Unseen. In England this search was, by a scientific method, for that grave hidden menace the submarine, particularly its location in the waters which led to harbours, where the fleets were seeking safe anchorage during refit or repairs.

On his return to McGill, his first problem was the detection of the electric effect of trains passing beneath the Library; a problem which he solved with his usual thoroughness and ingenuity.

At Cambridge he investigated the innermost regions of the atom, searching for the nature of the forces near the unseen nucleus.

Finally he became interested in the search for orebodies hidden and unseen beneath the surface of the ground. Last April, after a glowing account of Tasmanian flora and mineral wealth, he wrote to me, 'I am glad that you advised me to come, but I think there will be nothing to keep me from returning to McGill, once the work is done'.

"He revelled in the mysteries of these unseen regions, and now he has passed to the greatest mystery, to the secret which we too have to face; whether a perfect rest, 'a pulse in the eternal mind', or a continued personality in that transcendent region where there are many mansions.

"His faith in God and in our wonderful Universe was such that the transition would cause him more curiosity, to use a term reverently used by Charles Kingsley, than anxiety. Only three-quarters of an hour before his heart suddenly stopped beating he told the doctor that he was 'quite all right, and feeling fine'.

"There are young men whose lives have been singularly triumphant in a brief span of years. Mozart, among the very kings of music, had completed his work and his life at 35. Wolfe died far from his home, after a life full of difficulties and disappointments, but also of intelligent and strenuous training—victorious at the age of 32. Moseley, that meteor of science of immortal fame, took up arms at the outbreak of war, and gave his life at Gallipoli—almost a lad—at the age of 28. Keats, perhaps the second of English poets, died at 26. Rupert Brooke too died at 28, after writing in 1914 those prophetic lines,—

> If I should die, think only this of me
> That there's some corner of a foreign field
> That is forever England.

His grave is near the blue waters surrounding Scyros, where wild thymes and poppies blow; so also, outside the little city of Geraldton, among the hollows in the sand dunes, there is a corner of Australia that is forever Canada.

"Is it just to rank Bieler with this galaxy of bright spirits? Yes! He too has achieved a lasting niche in that temple of fame at least a little dear to those who give their lives to searching the unknown. 'That last infirmity of Noble mind'.

"Let it not be thought, however, that Etienne Bieler was merely a man of science; he was more! All the activities of life, at home, at work, at play, were followed with the same zest, enthusiasm and enjoyment, so that he was, as Bacon wrote, a 'full man', or, as Sophocles wrote, 'He saw life steadily and saw it whole'. He was keenly interested, too, in those things, and even more in those thoughts and ideals, which raise mankind in body and in soul. His faith was one of hope. It is hard to think, and not necessary to believe, that so active a personality is entirely at rest. So that we will not say farewell, but rather pay our tribute to this man who gave his life in the fields of science, no less than Laurence Binyon paid homage to those who fell in battle, when he writes in his poem, 'For the Fallen',—

> They shall not grow old, as we that are left grow old,
> Age shall not weary them nor the years condemn,
> At the going down of the sun and in the morning
> We will remember them."

The Trees of McGill University

(*Continued from page 21*)

September. On the other hand, it has the thin scaly bark of the American species and the young leaves have the velvety surface and purple colour of the young leaves of the Japanese plant, as well as the characteristic reddish spot at the point where the blade of the leaf joins the petiole. The beauty of the tree, its hardiness, rapidity of growth, and comparative freedom from insects and fungal diseases, make this new hybrid a valuable addition to our ornamental trees. The specimen which we have lost should be promptly replaced, especially because the young trees exhibit variations common among the children of hybrids.

There are on the campus examples of mutations or species which arise suddenly without crossing or any environmental cause and have strictly hereditary characteristics. Although the Lombardy poplar is considered by some a distinct species, *Populus italica*, most botanists think it to be merely a fastigiate variety of the black poplar, *Populus nigra*, from which it is distinguished by its columnar form due to its nearly vertical branches. Its origin is not known and it occurs only under cultivation. Though it seems to have been unknown to Pliny, it has been grown in Italy for several hundred years. It was not, however, introduced into other countries until the eighteenth century, having been brought to France in 1749 and to England in 1758. Soon afterwards it was grown in America, where it formed avenues along many a village street. Only staminate trees have been found and this makes it probable that the Lombardy poplars have all sprung from one male tree, which has been propagated by cuttings only. Those of the campus were planted nearly seventy-five years ago; five remain east of the Physics Building, and three others grow near the road leading to the new Medical Building.

Weeping forms and cut-leaved variations of several trees such as maples, birches, and elms, have frequently been produced by mutation and have been observed growing wild. On the campus are found fine specimens of the cut-leaved weeping birch, *Betula alba*, var. *pendula laciniata*, a mutant from the European white birch. The loveliest stands in front of the Biological Building. The play of light and shade upon the white bark and the graceful curves of delicate pendulous branches give it great beauty even in winter—a beauty enhanced in spring, when buds unfold into tender green leaves, when slender, yellowish, pollen-bearing catkins droop from the ends of twigs, and erect seed-bearing catkins spring from the centre of each group of leaves.

Near this tree, between it and the Arts Building, is another mutant, a little purple beech, *Fagus sylvatica* var. *purpurea*, in England called the copper beech. "Beech" is perhaps the oldest existing name of any wood.

The Anglo-Saxon *beoce*, *boc*, *bece* and the German *buche* are probably all derived from the Sanscrit *boko*, or letter, the name having originated from the fact that old Runic tablets were made from beech-wood. The purple beech differs from the ordinary form in having a reddish pigment in the sap which obscures the green due to chlorophyll granules. It probably is a mutation which would be constant if the tree were self-pollinated, but, since the majority are crossed by the commoner green type, the descendants are hydrids which vary to a high degree, no doubt according to Mendel's law. The dwarfed specimen on the campus, struggling against our climate for a precarious existence, seems at first glance to differ greatly from its European forebears. But it shares their interesting history. According to Professor Jäggi, quoted by de Vries, this mutation appeared in three original localities. One was near the Swiss village, Buch am Irchel. As early as 1190, the purple beeches of Buch attracted large numbers of pilgrims because of some old legend associated with them. In consequence, the church of Embrach was built there and for many centuries was the goal for pilgrimages. During the seventeenth century five trees survived and one was still alive in 1906. A second fine group of purple beeches was found growing wild in a forest near Thüringen, Germany. These were first mentioned in the 17th century and recognized as old trees. Then, about one hundred and twenty-five years ago, a group was discovered growing wild in the Southern Tyrol. These may have been introduced from Thüringen, but it is probable that this mutant has arisen three times at least. Though the tree is now widely cultivated, Professor Jäggi has shown that all specimens but those at Buch are probably descended from the group at Thüringen.

Opposite the Engineering Building is a lovely specimen of the Spindle-tree, *Enonymus europaeus*, introduced thirty years ago by Dr. Penhallow and planted by Mr. Graydon. It has opposite lanceolate leaves and loose, flat clusters of small greenish flowers, which are succeeded by lobed capsules of a pale pinkish-purple colour. Like those of the closely related bitter-sweet, the pods burst open and display the seeds, each enclosed in a bright red aril, or outgrowth from the true seed coats. The popularity of this small tree is due largely to the autumn beauty of its fruits. Because of these, such names as "burning bush" and "strawberry bush" are given to the American species, which are found growing wild from Ontario to Florida. The old English names for the European species are many, including arrowbeam, prickwood, cat-tree, pincushion shrub, skiverwood, pegwood, and witchwood.

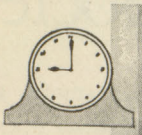
Three trees standing on the lower edge of the hollow near the Redpath Museum are especially attractive. The most beautiful is the Norway maple, *Acer platanoides*. The Hon. John Young presented several to the University about seventy years ago, but this alone survives. It resembles the sugar maple, but has larger leaves of a deeper green with larger basal lobes. A distinctive character of the Norway maple is the milky juice which exudes when a petiole is broken. Its conspicuous, flat clusters of yellow green flowers appear at the same time as the leaves. The key-fruits are much larger than those of any of our native species and are united at a wider angle, giving a horizontal effect as they hang from the twigs in conspicuous clusters. This hardy tree grows as a native over Northern Europe and is widely cultivated in America.

Beside the Norway maple to the east is a large black willow, *Salix nigra*, which was probably planted at the same time as the former. A little to the north of the Norway maple is a black walnut, *Juglans nigra*, planted by Sir William Dawson fifty years ago. It is said to be the first to grow upon the island of Montreal. When occurring in rich woods, as it does from Southern Ontario to Florida and Texas, it may reach a height of one hundred and fifty feet, with a trunk eight feet or more in diameter. The McGill specimen is smaller, but its long drooping catkins, pinnate leaves, and large spherical fruits make it an object of beauty.

Thirty years ago Professor Penhallow, who had been a Professor of Botany in Japan, received from that country a specimen of the Ginkgo or Spindle-tree. It showed few signs of life, but was planted by Mr. Graydon in front of the Founder's tomb. It has now developed into the fine tree which lifts whorls of graceful branches before the entrance to the Arts Building. *Ginkgo biloba* is the only modern species of an ancient group which was abundant in Mesozoic times. Once it was thought to be more nearly related to the yews than to other Gymnosperms, but close study of the genus has led to its separation from the Coniferales and the establishment of the order Ginkgoales which includes fossil species as well as the modern. Formerly the genus Ginkgo was widely distributed over the entire Northern Hemisphere, and in Canada was represented by several species in Cretaceous and Tertiary times. The modern Ginkgo is supposed to have been indigenous in China, where travellers have reported finding very old trees growing wild. Now it is found only under cultivation. In China and Japan it is considered a sacred tree and is planted near temples as well as in gardens. Probably, as Dean Ira Mackay has suggested, the form of the pagoda was an imitation of the pyramidal form of the tree, whose branches grow in gradually diminishing whorls about the central trunk.

In 1712, Kæmpfer published a drawing of a Japanese tree under the name of Ginkgo, and in 1771 it was described by Linnæus, who gave it the name of *Gingko biloba*, because its leaves have a deep central notch. Soon the Ginkgo became a favourite ornamental tree in both Europe and America. Even before our present specimen

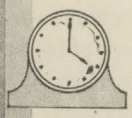
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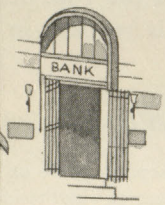
THAT MORNING

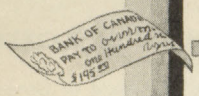


Mystery doings!

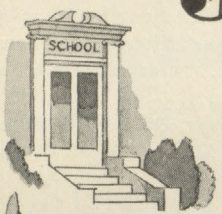


SAME CLOCK
SAME DAY

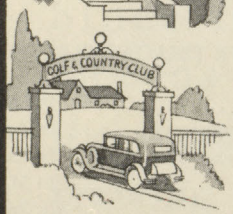




JANET LIGHTHEART'S husband's bank account was suddenly robbed, to the extent of $195.00—(the affair was kept from the police). The following Wednesday morning all three children were driven in the BLUE car to school (the first time Mrs. Lightheart ever did such a thing).

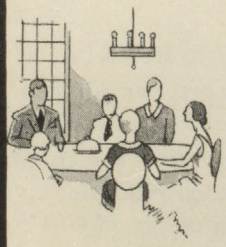


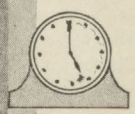
—Neighbors noticed the BLUE car did not return all day (there were no servants, and the house was clearly locked up).
—About five-thirty, two visitors stepped from the BLUE car when Mrs. Lightheart drew up before the front door (three hungry children made a total of six).



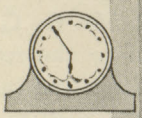
—Ten minutes later John Lightheart sat at the head of the table and asked Janet's friends if they preferred dark meat or some of the breast (the vegetables, too, were delicious as well as the rice pudding).

—"What a wonderful cook you have, Janet," said friend number one. (Janet shook her head). "Then I know the mystery," said friend number two (she was right—it was a





SAME CLOCK
SAME DAY



SAME CLOCK
SAME DAY

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Annual Meeting of the Graduates' Society

ON October 8th, the joint Annual Meeting of the Council of the Graduates' Society, and of the Graduates' Society of McGill University, was held in the Arts Building, with Mr. G. S. Currie presiding.

The minutes of the semi-annual meeting of the Council, held on May 14th, were approved, and Mr. G. B. Glassco, Executive Secretary of the Society, then presented a statement on membership, showing that 1,100 graduates were enrolled as members of the Parent Society and added to these were 1,868 listed as members of the various Branches.

REPORT ON MEMBERSHIP

Branch:	Members
Parent Society (exclusive of Branches)	1,100
Branches:	
Montreal	1,160
Alumnæ	311
Ottawa	137
Quebec	5
New York	55
Toronto	95
Chicago	14
Detroit	10
Winnipeg	0
Northern Alberta	9
Southern Alberta	0
Vancouver	19
Victoria	26
Halifax	21
Saskatoon	0
Hamilton	0
District of Bedford	0
California	0
New England	0
Life Members whose addresses are lost	6
Total, branches only	1,868
Total of All	2,968
Comparison, October 1st, 1928	2,992
Members dropped since January 1st, 1929 (non-payment of dues)	427
Life Membership Categories:	
(*a*) Those who paid $10 for Life Membership	117
(*b*) " " " 25 " " "	5
(*c*) " " " 50 " " "	36
(*d*) Honorary Life Member	1
	159

Following the report of membership, Mr. H. W. Morgan, the retiring Honorary Secretary, read the financial report submitted by the auditors for the year 1928-'29, showing that expenses had exceeded revenue by $240.53. In discussing the financial report, it was shown that the Society would benefit this year through undertaking the publication and sale of programmes at the University football games and that the small operating deficit, incurred largely through the installation of new office equipment and an extensive revision of record cards and data, would be met by this means, with some margin to spare.

When discussion of this report ended, the Secretary presented the result of the vote held from July 20th to September 30th. This resulted in the following elections:

OFFICERS ELECTED TO THE GRADUATES' SOCIETY

Dr. C. W. Colby.....Representative on the Board of Governors.
Dr. R. Tait McKenzie...Second Vice-President.
Mr. O. S. Tyndale.....Honorary Secretary.
Mr. D. H Macfarlane...Honorary Treasurer.
Mr. F. B. Common.....Member Executive Committee.
Mr. A. D. McCall..... " " "
Dr. L. C. Montgomery, Dr. E. B. Chandler, and Messrs. J. de G. Beaubien, L. E. Reford, and M. F. MacNaughton—Members of Council.

REPRESENTATIVE FELLOWS ELECTED TO CORPORATION

Dr. H. S. Shaw.....In Medicine.
Mr. H. L. Fetherstonhaugh.....In Applied Science.
Hon. A. R. McMaster.....In Law.
Dr. J. S. Jenkins.....In Maritime Provinces.
Mr. W. D. Wilson.....In Province of Ontario.
Mr. G. E. Housser.....In Western Provinces.
Dr. W. W. Colpitts.....In Countries outside Canada.

The above report was adopted and Mr. G. C. McDonald then moved a vote of thanks to the retiring officers, which was seconded by Mr. Little, and carried.

The meeting then proceeded to review policies governing production of the *McGill News*. In the absence of Dr. A. T. Bazin, Chairman of the Editorial Committee, Mr. P. S. Fisher, Chairman of the Business Committee, stated that the magazine showed a loss for the year of $560.35, substantially less than the $1,000 loss which the Society had been prepared to shoulder. He attributed this satisfactory showing to an increase in revenue from the placement of additional advertising and to a decrease in distribution costs brought about by a substantial saving effected in the postage rate secured for recent issues.

Continuing his report on the *News*, Mr. Fisher stated that its purpose was two-fold, namely, to supply news of the University and its alumni to members of the graduate body, and to afford a medium of expression to Canadian authors through the literary Supplement. Emphasis had in the past been placed upon the second of these functions and, in order that the value of this

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emphasis should not be lost, Mr. T. W. L. MacDermot, Editor of the Magazine, had been provided with an associate, Mr. R. C. Fetherstonhaugh, who had assumed responsibility for the news, or general, section. By this means, it was hoped, each section of the magazine would develop, not competing with one another, but fulfilling its individual function to the ultimate benefit of the whole.

Discussion of policy continued after Mr. Fisher's report had been read, but no motion was presented to the meeting; the general feeling being that the *News*, though open to criticism as all magazines are, was on the whole satisfactory, and that no change of policy was advisable.

When this point had been settled, Mr. A. P. Murray, Chairman of the Endowment Fund Committee, reported for the year, stating that, though collections in the last two years had improved markedly in number and value, the improvement had been effected in face of serious obstacles, not least being the fact that interest on the Fund had in the past been added to capital and not expended in a manner to interest those whom the Committee must canvass. Though the wisdom of this policy from one point of view might be upheld, Mr. Murray believed, and the meeting passed a resolution advising, that revenue from the Fund, or at least a substantial sum from revenue, be definitely set aside for some purpose of a suitable nature.

Summarizing the work of his Committee, Mr. Murray showed that in 1928-'29, 121 new subscribers had been secured, making a total of 712 for the session and 1,476 since the Fund began. Receipts during 1928-'29 totalled $10,847.50.

After discussion of the Endowment Fund report, Brigadier-General G. E. McCuaig reported for the Graduates' Society's representatives on the Board of Governors, Mr. J. C. Kemp reported on the Athletic Board, and Mr. G. McL. Pitts on the Students' Council. Mr. Walter Molson, Brigadier-General G. E. McCuaig, and Mr. Gregor Barclay were then elected to the Nominating Committee for a period of three years from October 1st; and Messrs. Clarkson, McDonald, Currie & Co. were appointed auditors of the Society for the current year.

In reporting for the Representatives of the Society on the Board of Governors, Brigadier-General McCuaig presented the following list of recent appointments:

APPOINTMENTS

F. M. G. Johnson, Ph.D., B.Sc., M.Sc, Director, Dept. of Chemistry.
F. C. Harrison, D.Sc., B.Sc., Dean of the Faculty of Graduate Studies.
Douglas Clark, B.A. (Cantab), Director of the Conservatorium.
F. Clarke, M.A., Professor of Education in the Faculty of Arts.
C. M. Morssen, Research Fellow in Civil Engineering.
Leslie R. Thomson, B.A., Sc., Professor of Fuel Engineering.
C. W. Hendel, Ph.D., Macdonald Professor of Moral Philosophy.
Dr. Abbott-Smith, Professor in the Dept. of Semitic Languages.
T. H. Matthews, M.A., Assistant Registrar.
F. P. Chambers, Assistant Professor in Architecture.
Georges Edouard LeMaitre, Assistant Professor of Romance Languages.
Mr. Justice Surveyer, B.C.L., Professor of Criminal Law & Procedure.
O. S. Tyndale, K.C., B.A., M.A., B.C.L., Professor of Civil Procedure.
A. S. Bruneau, B.A., B.C.L., Lecturer in Commercial Law.
Brooke Claxton, B.C.L., Lecturer in the Law of Insurance.
F. R. Scott, B.A., B.C.L., Assoc. Prof. of Federal and Constitutional Law.
Arthur I. Smith, B.A., B.C.L., Lecturer in Commercial Law in the Department of Commerce.
T. W. L. MacDermot, M.A., Asst. Professor in the Dept. of History.
J. W. Scott, M.D., Assistant Professor of Bio-Chemistry.
E. W. R. Steacie, Ph.D., B.Sc., M.Sc., Lecturer in Chemistry.
Donald R. Patton, B.Com., Lecturer in Accountancy.
Eugene Forsey, M.A., B.A., Lecturer in the Department of Economics.
David Howat, M.A., Lecturer in the Department of Mathematics.
A. A. Burridge, B.A., Assistant Physical Director and Rugby Coach.
P. W. MacFarlane, Superintending Engineer.

In addition to appointments, resignations and promotions were recorded, and the following gifts to the Faculty of Medicine were announced:

$50,000.00—from anonymous friends of the University for the Dept. of Neurological Surgery.
$10,000.00—from Mrs. Ottmann, for research in Epilepsy, also for the Dept. of Neurological Surgery.
$10,000.00—for research in Experimental Medicine from Dr. and Mrs. C. F. Martin.

There being no further business, the meeting then adjourned.

Personals

(*continued from page 25*)

The Hon. John Sprott Archibald, LL.D., Arts '67, Law '70, received many congratulations in September on his 86th birthday.

Clarence J. McGerrigle, Arts '23, has been appointed associate secretary of the Y.M.C.A. branch in Notre Dame de Grace, Montreal. J. M. C. Duckworth, Arts '27, is the Secretary.

Gordon S. Harrower, past student, of the firm of B. H. Porteous & Co., has been elected a member of the Montreal Stock Exchange.

Dr. Walter S. Atkinson, Med. '14, of Watertown, N.Y., attended the International Congress on Ophthalmology at Rotterdam, and later attended clinics in Berlin, Prague, Vienna, and Budapest.

Upon formation of the Conservative Government in Saskatchewan, Dr. Frederick D. Munroe, Med. '06, has been appointed Minister of Public Health and Child Welfare.

Daniel P. Gillmor, K.C., Arts '11, Law '13, has been appointed senior English Crown Prosecutor, Montreal, succeeding the Hon. A. R. McMaster, Arts '97, Law '01, appointed Provincial Treasurer.

Rev. J. F. Morris, Arts '11, has been appointed rector of the Church of the Ascension, Montreal, succeeding the late Canon Flanagan. He was formerly rector of St. Clement's Church, Verdun, and is a graduate of the General Theological Seminary, New York.

K. E. Norris, Arts '29, has been appointed registrar and bursar of the Sir George Williams College, Montreal.

(*continued on page 35*)

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Notes

Dr. Douglas Clarke, whose appointment as director of the McGill Conservatorium of Music took effect this autumn, has announced a programme designed to widen appreciably the range of the Conservatorium's activity. Messrs. Paul de Marky, Harry Norris, and Victor Brault, all musicians of standing, have been appointed respectively to the departments of the piano, the violin, and singing.

On September 18th, the Hon. Herbert Marler (Law '98) was received in audience by H.M. the Emperor Hirohito and presented his credentials as the Dominion of Canada's first Minister to Japan.

Previous to the opening of the autumn session, the University announced the appointment of Dr. Charles W. Hendel, of Princeton University, as Macdonald Professor of Moral Philosophy and Chairman of the Department of Philosophy at McGill. Dr. Hendel succeeds Professor William Caldwell, who is retiring after twenty-six years' service.

On September 30th, following a hard political battle, the Hon. A. R. McMaster, K.C. (Arts '97, Law '01) newly-appointed Treasurer of the Province of Quebec, contested Compton County on behalf of the Taschereau government and held the seat by a majority of 217 votes.

The Hon. Ernest Lapointe, Dominion Minister of Justice, announced recently the appointment of William Patterson, K.C., (Arts '86, M.A. '89, Law '95) to succeed Mr. Justice Bond on the Bench of the Superior Court of the Province of Quebec.

Dr. Berthold Laufer, of the Field Museum of Natural History, Chicago, has compiled a pamphlet dealing with the Gest Library of Chinese Research at McGill, with a foreword by Sir Arthur Currie. Dr. Laufer points out that research in medicine, pharmacology, and astronomy has already yielded important results, and expresses the opinion that the Library, formed by Mr. G. M. Gest from the collections of Manchu princes and bibliophiles, will prove invaluable, including, as it does, one of the "most superb Buddhistic libraries in existence."

The *Canadian Magazine* presented in September an interesting article by Mr. Paul Montgomery on the Gest Library of Chinese Research at McGill. Dr. Robert de Résillac-Roesi, Gest Research Librarian, is a contributor to this number of the *News*.

Another contributor to this number of the *News* is Dr. J. A. L. Waddell (Sci. '82), Engineering Advisor to the National Government of China. Referring to Dr. Waddell's "Memoirs and Addresses of Two Decades," edited by Mr. Frank W. Skinner and published by the Mack Printing Co., Easton, Pa., Dean H. M. Mackay, of the Faculty of Applied Science, says "The book is good reading from cover to cover; and, as such, as well as for the value of its contents, especially to bridge engineers, is to be commended."

Having reached the age limit of 75 years, Mr. Justice P. B. Mignault (Law '78, LL.D. '20) retired recently from the Bench of the Supreme Court of Canada. Attired in traditional scarlet and ermine, Mr. Justice Mignault's colleagues attended his final sitting, the Chief Justice joining in the good wishes expressed alike by members of the Bench and Bar throughout Canada.

In a decision delivered in October, Mr. Justice C. D. White (Law '96) upheld the right of the Bank of Montreal to contribute to the Joint Campaign of the Montreal hospitals in 1927, and denied a petition to have the Bank's subscription of $200,000 declared illegal. A. R. Holden, K.C. (Arts '91, Sci. '95, Law '01) appeared for the Bank and its directors; the Hospitals were represented by George H. Montgomery (Law '97); and Aime Geoffrion (Law '93) acted as counsel for all the defence parties involved.

At the autumn Convocation of the University held in Moyse Hall on Monday, October 7th, Sir Arthur Currie presided and conferred a total of forty-six degrees. Six diplomas were also presented. Following the opening prayer by the Rev. G. Abbott-Smith, Dean of the Montreal Theological College, who also pronounced the benediction, the Principal delivered the main address, which, in honour of Founder's Day, dealt with the memory of James McGill and the manner in which the University sought, and must ever seek, to fulfil its responsibilities in the life of the Nation.

Amongst those receiving honorary degrees from Queen's University at the autumn convocation in October, was Dr. H. A. Lafleur (Arts '82, Med. '87), Emeritus Professor of Medicine at McGill, who received an LL.D. In view of the position held by the recipient in the medical life of the Dominion, pleasure in this honour was unusually widespread.

Under the title "The Making of McGill," *MacLean's Magazine* published in October a series of articles by Mr. Frederick Edwards, describing most interestingly the abundant tribulation which the University suffered in its early days and its rise to the position it now holds. The author acknowledges gratefully the assistance in his work afforded by Lieut.-Col. Wilfrid Bovey and Dr. Cyrus MacMillan.

In welcoming to the Province of Quebec the 18th annual convention of the Investment Bankers' Association of America, Premier L. A. Taschereau (LL.D. '21) said "Americans are welcome here. We need their capital. Let it be well understood that, when here, they will receive fair treatment . . . but they must co-operate with us . . . and not injure our basic industries by unwise competition. Pardon my words, if they are harsh, but public opinion will not agree to be dictated to, nor to our natural resources being imperilled for the benefit of a most lovable neighbour."

In order that Montreal citizens might enjoy Bernard Shaw's *The Philanderer* and *Arms and the Man*, presented by the Maurice Colbourne Company, for whom no theatre in the city could be secured, the University offered Mr. Colbourne the use of Moyse Hall for the week of October 15th. In a curtain speech after the first performance, Mr. Colbourne acknowledged indebtedness, stating that never before had the co-operation of a great University been afforded him. The excellence of his company's work more than justified the University's assistance.

Under the auspices of the Department of Extra-Mural Relations, Dean Ira Mackay, Dr. A. S. Lamb, Dr. A. S. Eve, Lieut.-Col. Wilfrid Bovey, Dr. W. D. Woodhead, and Professor Ramsay Traquair will lecture in Quebec City this autumn and winter; and two plays will be presented, one by the McGill Players and one by the Department of English.

The Faculty of Applied Science is providing this year a course in aviation and æronautics, in co-operation with the McGill Light Aeroplane Club. Lecturers will include Professor C. M. McKergow, Capt. H. Spooner (Club instructor), Dr. A. S. Eve, and Dr. D. A. Keys. McGill is the first University in Canada to add a flying course to its curriculum.

Personals

(*Continued from page 32*)

Rev. Norman Egerton, Arts '23, formerly assistant at the Church of the Ascension, Montreal, is now rector of Waterloo, Que.

Rev. E. Bruce Copland, Arts '22, who recently returned from studies in Edinburgh and Paris, has proceeded, with Mrs. Copland, to South Formosa, where they are undertaking mission work.

Miss Edith Baker, Arts '19, who has been on the staff of the Montreal High School for two years, has been appointed to the educational department of the Y.W.C.A. in Tokio, representing the Montreal Y.W.C.A. in Japan.

"Beyond the Road's End," a book of poems by Warwick Chipman, K.C., Arts '01, Law '04, of Montreal, has met with a most favourable reception.

Dr. William Rogers, Arts '89, Med. '92, of Winnipeg, is the new president of the Medical Council of Canada. Dr. J. F. Argue, Med. '96, of Ottawa, continues as the registrar.

J. Gordon Nelles, Comm. '28, has joined the staff of Financial Service, Limited, Montreal, as an assistant editor.

J. H. Woods, past student, of Calgary, has been elected president of the Canadian Chamber of Commerce, the annual meeting of which was held in Calgary.

Major A. L. S. Mills, D.S.O., Arts '14, has been promoted to lieutenant-colonel and to command of the 1st Battalion, Royal Highlanders of Canada, Montreal.

Dr. D. A. MacKercher, Med. '26, of Maxville, Ont., formerly house surgeon at the Civic Hospital, Ottawa, is now practising in Cobden, Ont.

William T. May, Sci. '12, has joined the Milton Hersey Company, Limited, Montreal. He has had wide mining experience in Canada and the United States.

Oswald S. Finnie, Sci. '97, Director of the North-west Territories Branch of the Department of the Interior, has returned to Ottawa after an inspection in Canada's northern regions, which included a flight from Aklavik to Dawson City in six and one-half hours.

Rev. Charles E. Jeakins, Arts '01, Brantford, Ont., is to become vice-president of Kiwanis International as a result of his nomination by the Ontario-Quebec-Maritime Kiwanis convention.

J. Noel Beauchamp, K.C., Law '16, Hull, Que., has been admitted to the Bar of Ontario.

In honour of his election to the presidency of the Canadian Authors' Association, Dr. W. D. Lighthall, Arts '79, Law '81, was in September tendered a dinner at the Place Viger Hotel by the Montreal Branch of the Association.

Dr. Arthur A. Haig, Med. '26, is practising in Lethbridge, Alberta.

John S. B. MacPherson, Law '21, has been appointed Crown Prosecutor for the District of Montreal, succeeding William Patterson, K.C., Arts '86, Law '95, promoted to the Bench of the Superior Court.

(*Continued on page 39*)

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Deaths

ATWATER, Albert William, K.C., Arts '77, Law '80, on November 2nd, at Intra, Italy.

BASKEN, Dr. John Thomas, Med. '95, on September 26th, at Ottawa, Ont.

GARDINER, Dr. Alfred Ernest, Med. '08, on August 21st, in Saint John, N.B.

GARDNER, Dr. John J., Med. '85, on August 31st, in Montreal, P.Q.

ISBISTER, Thomas Glendenning, Arts '28, accidentally drowned on September 8th. Buried at Landsdowne, Ont.

JESS, John Andrew, Arts '15, in September, at Victoria, B.C.

KAVANAGH, Henry J., K.C., Law '78, on September 18th, at Montreal, P.Q.

MIGNAULT, Dr. Louis Daniel, Med. '80, on August 24th, at Montreal, P.Q.

SHAW, Dr. Thomas Patton, Med. '93, on September 19th, at Montreal, P.Q.

SMITH, Dr. Richard E. Guy, Med. '96, on September 16th, at Montreal, P.Q.

WEIR, The Hon. William Alexander, Law '81, on October 22nd, in London, England.

Since the last issue of the *News*, the Faculty of Medicine has suffered the loss of a number of outstanding Alumni. In Montreal, Dr. John J. Gardner, formerly on the teaching staff of the University, died on August 31st, aged 72 years; his death being followed a few weeks later by that of Dr. T. P. Shaw, who for many years had served as a childrens' specialist at the Western Hospital. Dr. Richard Smith, who died on September 16th, was not practising at the time, but was well known in Montreal, where he had lived for more than thirty years.

In the death of Dr. J. T. Basken, the Ottawa Valley Branch of the Graduates' Society lost a former president and the City of Ottawa a physician who for many years had served both faithfully and well. McAdam Junction, N.B., lost in a similar way when Dr. A. E. Gardiner, formerly Medical Officer of the 55th Battalion, C.E.F., died of pleuro-pneumonia in Saint John, N.B., on August 21st.

Three days later, medical circles in Montreal heard with regret of the death of Dr. L. D. Mignault, who had served formerly as a physician on the staff of the Hôtel-Dieu, as Medical Secretary to the Université de Montréal, and as medical adviser to a number of the city's religious orders.

The Faculty of Law lost two well-known graduates, both of whom died abroad, the Hon. W. A. Weir in London, England, on October 22nd, and A. W. Atwater, K.C., at Intra, Italy, on November 2nd. Mr. Atwater had served at one time as Provincial Treasurer of the Province of Quebec and was noted for many years as an authority on marine and corporation law. Mr. Justice Weir, of the Superior Court, had also served the Province in a political capacity, as a member for Argenteuil, in the Provincial Cabinet, and as Speaker of the Legislative Assembly. Henry J. Kavanagh, K.C., who died in Montreal on September 18th, was a former Batonnier of the Bar of the Province of Quebec, and will be long remembered for his outstanding work in compiling an edition of the Civil Code of Lower Canada.

In October the Society received news of the death in Victoria, B.C., of John Andrew Jess, a native of Ireland, who graduated in Arts in 1915 and proceeded overseas in the ranks of the 5th Canadian Mounted Rifles. He was wounded in 1916, and again at Passchendæle, where he won a field commission for valuable service to his unit. Returning to Montreal, he studied at the Presbyterian College until, in 1919, his health broke down, as a result of his having been gassed in France. Another Arts graduate who died in September was Thomas G. Isbister, accidentally drowned while canoeing at Lachine, P.Q. Aged 23, he was at the time of his death continuing his studies in Law.

* * *

Births

ABRAHAM—In Montreal, on August 20th, to Dr. Johnston W. Abraham, Dent. '23, and Mrs. Abraham, a daughter.

ANTLIFF—In Montreal, on November 7th, to J. C. Antliff, Sci. '23, and Mrs. Antliff, a son.

BARNES—In Montreal, on November 9th, to Dr. W. H. Barnes, Sci. '24, and Mrs. Barnes, a son.

BEARISTO—In Trenton, N.J., in August, to Dr. Everett Bearisto, Med. '24, and Mrs. Bearisto (Doris Atkinson, Arts '24), a son.

BEHAN—In New Haven, Conn., on October 18th, to Dr. E. J. Behan, Med. '22, and Mrs. Behan, a son.

BOOTH—In Montreal, on August 20th, to Percy Booth, Arch. '16, and Mrs. Booth, a son.

BRANCH—In Montreal, on October 19th, to Dr. Arnold Branch, Med. '20, and Mrs. Branch, a son.

BRONSON—In Ottawa, on September 18th, to Frederic E. Bronson, Sci. '09, and Mrs. Bronson, a daughter.

CAMP—In Montreal, on August 16th, to Eric W. Camp, Sci. '18, and Mrs. Camp, a son.

CHARLTON—In Montreal, on November 12th, to E. A. Charlton, Sci. '17, and Mrs. Charlton, a daughter.

CHISHOLM—In Montreal, on November 3rd, to J. F. Chisholm, Law '21, and Mrs. Chisholm, a daughter.

CREWSON—In Hamilton, Ont., on August 27th, to Dr. Walter L. Crewson, Med. '21, and Mrs. Crewson, a son.

ELLIOTT—In Montreal, on September 12th, to Dr. J. M. Elliott, Med. '24, and Mrs. Elliott, of Quebec, a daughter.

HAMILTON—At Sayre, Pa., on September 20th, to Dr. Ronald L. Hamilton, Med. '23, and Mrs. Hamilton, a daughter.

HOOPER—In Montreal, on August 17th, to Dr. W. M. Hooper, Arts '21, Dent. '23, and Mrs. Hooper, a son.

HUGHES—In Montreal, on September 25th, to W. P. Hughes, Arts '12, Law '18, and Mrs. Hughes (Adella Currie, Arts '14, Law '20), a son.

JEAKINS—In Montreal, on August 24th, to J. W. Jeakins, Arts '13, and Mrs. Jeakins (Dorothy G. Hicks, Arts '17), a son.

JENKS—In Montreal, on September 5th, to Dr. A. N. Jenks, Dent. '20, and Mrs. Jenks, a son.

JOHNSON—In Montreal, on November 12th, to Hammon Johnson, Sci. '15, and Mrs. Johnson, a daughter.

JOHNSTON—In Montreal, on November 5th, to Morgan M. Johnston, Arts '15, and Mrs. Johnston, a son (premature).

KENT—In Montreal, on November 1st, to Dr. Leonard E. Kent, Dent. '23, and Mrs. Kent, a daughter.

Ladouceur—On September 3rd, at Casselman, Ont., to Dr. F. Ladouceur (Med. '19) and Mrs. Ladouceur, a son.

Leslie—In Montreal, on October 4th, to Eric A. Leslie, Sci. '16, and Mrs. Leslie (Florence Kilgour, Arts '17), a son.

Lyman—At Montreal, on August 9th, to W. K. Gordon Lyman, Sci. '21, and Mrs. Lyman, a son.

Macfarlane—In Montreal, on September 2nd, to Donald H. Macfarlane, Sci. '21, and Mrs. Macfarlane, a daughter.

MacNaughton—In Montreal, on October 11th, to M. F. MacNaughton, Sci. '22, and Mrs. MacNaughton, a daughter.

Martin—In Montreal, on September 25th, to Dr. N. Leslie Martin, Dent. '26, and Mrs. Martin, a son.

McCabe—To Mr. and Mrs. McCabe, of Shawinigan Falls (Virginia Campbell, '28), a daughter.

McEvenue—In Toronto, on August 26th, to St. Clair McEvenue, Sci. '13, and Mrs. McEvenue, a daughter.

Moyse—In Montreal, on Deptember 26th, to Dr. M. D. Moyse, Med. '20, and Mrs. Moyse, of Waterloo, Que., a son.

Murphy—On September 17th, at Washington, D.C., to Capt. W. H. Murphy, U.S. Army (Sci. '11, M.Sc. '15) and Mrs. Murphy, a son.

Nicholson—In Montreal, on November 9th, to J. Gordon Nicholson, Law '21, and Mrs. Nicholson, a son.

Norris—In Montreal, on September 5th, to J. H. Norris, Sci. '12, and Mrs. Norris (Kathleen Wilder, Arts '13), a son.

O'Brien—In Montreal, on October 21st, to John L. O'Brien, Arts '20, Law '23, and Mrs. O'Brien, a son.

Pesner—In Montreal, on November 11th, to Dr. I. N. Pesner, Dent. '20, and Mrs. Pesner, a daughter.

Ritchie—On September 29th, to A. Bruce Ritchie, Sci. '06, and Mrs. Ritchie, Trail, B.C., a daughter.

Roman—In Montreal, on September 22nd, to Dr. C. Lightfoot Roman, Med. '19, and Mrs. Roman, of Valleyfield, Que., a son.

Ross—In Montreal, on September 12th, to Dr. Herbert Ross, Med. '00, and Mrs. Ross, a son.

Simon—In Montreal, on August 31st, to Dr. M. L. Simon, Dent. '23, and Mrs. Simon, a daughter.

Simpson—To Mr. and Mrs. W. S. Simpson, of Montreal (C. Olga McCallum, '16), a son.

Skelley—At Quebec, on August 12th, to Dr. A. J. Skelley, Med. '24, and Mrs. Skelley, of Beaupré, Que., a daughter.

Tett—In Toronto, on August 29th, to Harold B. Tett, Sci. '14, and Mrs. Tett, a son.

Trites—In Monreal, on November 8th, to Dr. A. E. Trites, Med. '24, and Mrs. Trites, a son.

Walter—On September 17th, in Montreal, to Arthur W. Walter, Sci. '17, and Mrs. Walter, a son.

Watt—In Montreal, on September 30th, to Leslie A. Watt, Sci. '23, and Mrs. Watt, a daughter.

Woodhouse—At Iroquois Falls, Ont., on August 26th, to D. H. Woodhouse and Mrs. Woodhouse (Helena Thomson, Arts '24), a son.

* * *

Marriages

Alexander-Parker—On September 28th, at Montreal, Helen Margaret Parker, Arts '26, and Edward Ryckman Alexander, M.A., Arts '24, son of Dr. W. W. Alexander, Med. '91, and Mrs .Alexander.

Bagg-McPartlin—On August 3rd, in Montreal, Elizabeth McPartlin, Arts '22, and W. Herbert Bagg, Arts '21.

Baker—In Montreal recently, Phyllis Baker, Arts '29, and Mr. Steeves.

Burland—On August 23rd, at Winnipeg, Arabelle June Irwin and Geoffrey Robins Burland, past student.

Buzzell—On October 25th, at Montreal, Helen Margaret Drummond and Leslie Norman Buzzell, Comm. '23.

(*Continued on page 38*)

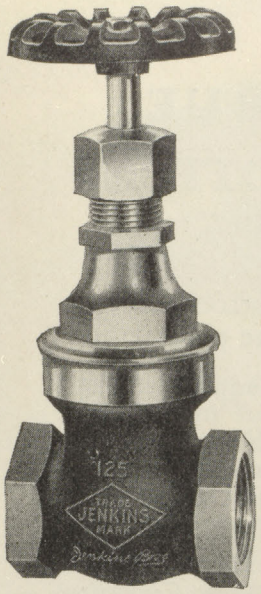


Fig. 300

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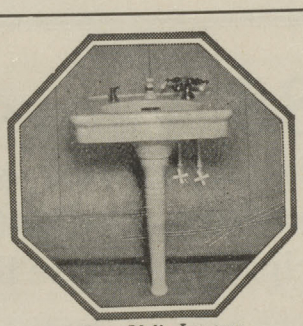
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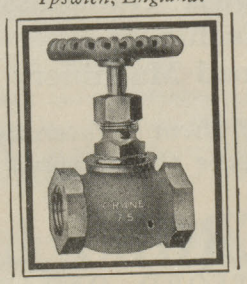
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Marriages

(*Continued from page 37*)

CHISHOLM—On November 2nd, at Richmond, Staten Island, Helen Stuart Boyd, of Dongan Hills, Staten Island, and Dr. Gavin William Chisholm, Med. '27. Westmount, Que.

CRAWFORD-McMILLAN—On October 5th, in Montreal, Myrtle McMillan, Arts '20, and Eric Anderson Crawford, Sci. '22.

CROZIER-CODE—In Ottawa, on November 8th, Carman W. Code, Arts '29, and Robert Nelson Crozier, Ph.D. '28.

DAWSON-CHISHOLM—At Ottawa, in September, Kathleen Vaughan Chisholm, Arts '28, and Vernon Dawson, Agr. '28.

ELLIS-NEWNHAM—At Livingstone, Africa, on July 26th, Kathleen Newnham, Arts '22, daughter of the Rt. Rev. Jervois A. Newnham, LL.D., Arts '78, and Mrs. Newnham, to David Hepburn Ellis, M.Sc., Sci. '25, of N'Changa, N'Dola, Northern Rhodesia.

FITZGERALD-JAMES—At Montreal, on September 23rd, Norah Gertrude James, Past Student, and Dr. Ralph R. Fitzgerald, Arts '19, Med. '22.

FULLERTON—On August 31st, at Knowlton, Que., Dorothy Slack and Dr. Charles Watson Fullerton, Med. '25, of Baltimore, Md.

GILES-BROOKS—On September 4th, in Montreal, Eleanor Irene Brooks, Arts '28, and Bevans Henry Drummond Giles, Sci. '25.

GRAHAM—On August 26th, at the residence of the bride's mother, Vera H. James and George Patterson Graham, Sci. '23, of Cornwall, Ont.

HAIG—On July 30th, at Claresholm, Alberta, Dr. Arthur A. Haig, Med. '26, and Phyllis G. Harrison-Forde.

HALPENNY—At Melbourne, Que., on August 31st, Lauretta Annabelle Georgina Lemoine and Merle Benjamin Halpenny, Sci. '25.

HALPERIN—In New York City, on August 28th, Fanny Jacobs and Dr. H. M. Halperin, Dent. '17, of Westmount, P.Q.

HAWLEY—On October 23rd, at St. Lambert, Que., Dorothy Headley and Lawrence Edwin Hawley, past student.

HENDERSON—At Beaconsfield, Que., on September 3rd, Helen Elisabeth Drummond and Dr. Arthur Theodore Henderson, Med. '13, of Montreal.

HORSEY—On September 16th, at Kingston, Ont., Harriet Ruth Anglin and Richard Mountstephen Horsey, Sci. '24.

HOWIE—At Westmount, Que., on August 21st, Edna Jean Henderson and Dr. John Howie, Med. '26.

HUTCHISON—In Indianapolis, Ind., on October 18th, Eleanor Masters and M. H. Hutchison, past student.

JOHNSTON—On September 6th, in Montreal, Beatrice Mary Tudor, daughter of Lt.-Col. Walter E. Lyman, Arts '81, and Mrs. Lyman (Anna M. Scrimger, Arts '99), to Major Henry Wyatt Johnston, Sci. '21, son of the late Dr. Wyatt G. Johnston, Med. '84, and of Mrs. Johnston, Montreal.

KINGMAN—In New York City, on October 23rd, Gwynneth Ramsay Godfrey and Abner Kingman, Jr., Arts '08. of Montreal.

LAURIN—In Montreal recently, Alice V. Laurin, Arts '23, and J. Vittie.

LAZAROVITZ—In Quebec, on September 22nd, Sadie Lazarovitz, Law '27, and Abraham H. Lieff, of Ottawa.

LONG—In Montreal, on October 18th, Catherine Marie Brenen and John Williams Long, Law '22.

LONGWORTH—In Charlottetown, P.E.I., on September 7th, Eileen Victoria Longworth, Arts '25, daughter of Charles H. B. Longworth, Sci. '94, and Mrs. Longworth, to George Hedley Buntain.

MACRAE—At Montreal, on September 12th, Elsie Lillian Jaques and Dr. Donald MacRae, Dent. '24, of Montreal.

McCALL-STOCKING—On September 6th, at Montreal, Mary Frances Storrs Stocking, Arts '26, and George Ronald McCall, Arts '21.

McDIARMID—On October 12th, in Montreal, Margaret Eileen Burton and Donald Carl McDiarmid, Sci. '25.

MAWDSLEY—At Ottawa, on August 24th, Phyllis Constance Fosbery and James Buckland Mawdsley, Ph.D., Sci. '21, of Saskatoon, Sask.

PARSONS—In London, England, on October 3rd, Audrey Divette, daughter of the late Dr. Frank Buller, Med. '79, and of Mrs. Buller, Montreal, to Lloyd Holman Parsons, Arch. '16.

PRATT—On September 5th, in Montreal, Phebe Gross and William Frederick White Pratt, Arts '21, Law '24.

RAFF (RAFOLVITCH)—At Westmount, Que., on September 26th, Sylvia Schwartz and Dr. Moe J. Raff (Rafolvitch), Med. '23.

SCHELESINGER-MARCOVITZ—At Montreal, on November 6th, Jeannette E. Marcovitz, Arts '28, and Dr. Israel A. Schelesinger, Med. '28.

SCOBELL—On August 31st, in Montreal, Olive Scobell, Arts '28, and R. W. Tyner.

SCOTT—At Saskatoon, on August 12th, Elizabeth Alexander Lockhart and Gordon Alexander Scott, M.Sc. '24.

SHATFORD—On October 1st, in Montreal, Ruth Marion Shatford, Arts '22, and Leslie Holmes, of London, England.

SHOREY—At Ottawa, on September 21st, Clare Walters and Harold Edgar Shorey, Sci. '07.

SMITH—In September, at Brantford, Ont., Adam Wyndham Smith, Sci. '23, and Mary Buckingham Marquis.

TAIT—On September 4th, in Montreal, Marjorie J. Tait, Arts '23, and V. Le Dain.

TEAKLE—At Lennoxville, Que., on September 21st, Florence Marjorie Francis and Cecil Thomas Teakle, M.A., Arts '24.

TEAKLE-OSTRANDER—In Montreal, on September 28th, Ruth Erma Ostrander, Phys. Ed. '27, and Harold Percival Teakle, Arts '27.

THOMPSON—On September 28th, in Montreal, Gladys Russell Small and Dr. Clifford Shaw Thompson, Med. '25.

THOMPSON—On August 31st, in Toronto, Dorothy Deane Tyrer and Dr. Robert Campbell Thompson, Dent. '27.

VINEBERG—On August 29th, in Montreal, Ethel Shane, and Solomon Vineberg, Ph.D., Arts '06, Law '16.

VINEBERG—In Westmount, Que., on October 15th, Zella Bronfman and Dr. Norman Maxwell Vineberg, Arts '23, Med. '24.

WALLACE—In Westmount, Que., on September 21st, Elizabeth Marjorie Rutherford and Reginald H. Wallace, Sci. '26, of Shawinigan Falls, Que.

WELSH—In September at Ottawa, Gertrude Dunning and John N. Welsh, Agr. '22, of Winnipeg.

WHITE—In Medford, Oregon, on August 24th, Laura M. White, Arts '15 and W. J. Cox.

WHITWORTH—On October 23rd, at Trail, B.C., Marguerite Millen and Dr. John Ewing Whitworth, Med. '28, of Coalmont, B.C.

WIGHT—In Montreal, recently, Evelyn Wight, Arts '27, and Mr. Richardson.

WISSE—On October 17th, at Westmount, P.Q., Sonia Black and Dr. William Horatius Wisse, Dent. '19.

Personals

(*Continued from page 35*)

EUGENE FORSEY, M.A., Arts '25, Rhodes Scholar in 1926, has returned to the University from Balliol College, where he received honours in Modern Greats, and has joined the staff of the Department of Economics and Political Science.

REV. HUGH MACPHAIL, Arts '25, has been inducted into the pastorate of Kenogami and River Bend, Que., under the United Church of Canada.

To mark the fiftieth anniversary of his entry into the medical profession, DR. MURDOCH CHISHOLM, Med. '79, was in October tendered a banquet in the Queen Hotel, Halifax, N.S., by his fellow-practitioners and presented with a portrait of himself in oils.



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The Chancellor's Visit to the West

(*Continued from page 15*)

for tuberculosis to be found in any country, situated amidst the pine forests, and constructed along the most approved lines, with out-houses for administration and magnificent quarters for the resident staff.

In Saskatoon, President Murray, of the University of Saskatchewan, met us at the station, and with him a number of graduates of our own University. Though but three hours were allowed for that visit, and those in the late evening, Dr. Peterson (Med. '19) gathered at his house most of the graduates of the city, and around his hospitable table there took place an interchange of news about the University. A visit to the residence of Dr. Lynch, Med. '03, to meet some others, closed our stay in Saskatoon, and it was a matter of regret that time did not permit us to see the excellently equipped University.

WINNIPEG.—The visit of the C.P.R. Directorate to Winnipeg is usually anticipated with interest; and the large banquet given by the citizens bore testimony to the popularity of the pioneer railway of Canada in the Middle West. Manitoba is naturally a centre of education within itself. The University of Manitoba attracts a large percentage of students from its own Province and comparatively few receive their education elsewhere. In earlier days, McGill attracted many youths from Manitoba, so that at present many leaders in the University, and more particularly in the Medical School, are graduates of our own University. The same tradition is being maintained, for the most recent appointment is that of C. Gilmour (Med. '03), as Professor of Medicine. George Stephens (Med. '07), Superintendent of the Manitoba General Hospital, is regarded throughout America as one of the outstanding leaders in hospital administration, but, loyal to Canada and his own city, has refused many flattering offers which might have led him from Winnipeg to the United States.

The McGill Banquet, held in honour of the Chancellor at Winnipeg, was one of the outstanding entertainments of the trip, both as regards the number and enthusiasm of those present. Sir Charles Tupper, Bart., Arts '05, was chairman, and Dr. Harvey Smith proposed the health of the guests, to which Mr. Beatty and Dr. Martin responded. As "cheer leader," Merrill (Sci. '11) excelled, and was ably assisted by Carruthers (Com. '22), in fact, by every one of the fifty and more guests around the tables. Many of our graduates, prominent in professional life in Manitoba, were present, and all Faculties were well represented. Dr. Jamieson (Med. '78) was accorded a special welcome as being the oldest graduate in the district. Most of all there was manifest an intense interest in what McGill was doing to contribute to the national welfare, for the feeling was strong

that no effort should be spared to make of our University an institution national in importance and so superior that it will be a natural Mecca for post-graduate work.

Leaving Winnipeg, there were few stops on the way home; and when the trip was ended, the conviction was present in everyone's mind that Canada's progress was only beginning; and that developments were pending which would make the country a harvest ground in which graduates might seek a career. With such a present, with such a prospect for the future, with such a rich country in agriculture, mining, and industry, there should be no need for our graduates to look elsewhere for a home, an occupation, and an assured future. Immediate success may be obtained in other lands, but the near future is certain to bring prosperity in our own country to those who have talent and industry, and are willing to grasp the opportunities that offer on every side.

The Trees of McGill University

(*Continued from page 28*)

was obtained, Sir William Dawson, who, as a palæobotanist, was especially interested in the ancient stock, obtained a specimen from a nursery in the United States. Other young trees were given by Mr. Charles Gibb, and were afterwards removed to the Botanical Gardens on the Côte des Neiges Road. None of these survive. Since seedlings are now growing at the new greenhouses, more examples of this tree may in time beautify the campus. The Ginkgo often reaches a height of ninety or one hundred feet. It has bark of a soft gray and glossy leaves which turn a pale yellow in the autumn. The leaves bear some resemblance to the leaflets of certain species of maidenhair fern, hence the popular English name of Maidenhair tree. The flowers are inconspicuous, the pollen-bearing ones forming short catkins, the female growing in small flat clusters. The seed which, as in all gymnosperms, is not enclosed in a seed vessel superficially resembles a whitish drupe or stone-fruit. The pulp of the seed is unpleasant to the taste and of no value, but the kernel is much liked by Orientals.

The old poplar on the east side of the campus near the gates has reached the end of its life. The ashes, at the Milton Street entrance, the horsechestnut on the north edge of the hollow, the staghorn, sumacs, and other small trees, shrubs and vines, must be left to the future for description.

NOTE:

At the suggestion of Dr. A. S. Eve, Miss Derick recently undertook to assemble the histories of the trees on the McGill Campus, and for this *McGill News* article she has selected the facts among those embodied in the complete record, on which she is still engaged. The photographs illustrating this article were chosen from an excellent series made by Mr. S. Amesse, of the Department of Physics.

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C. Russell McKenzie
J. Leigh Bishop
J. Angus Ogilvy
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Alumnæ Notes

1896—Mrs. Arthur Crumpton (Margaret Hutchinson) has returned to Toronto after spending a year and a half abroad.

1910—Df. Hardolph Wasteneys, husband of Clare Miller, M.A., Arts '10, has been appointed head of the Department of Bio-Chemistry in the University of Toronto.

Katherine Trenholme, Arts '10, is Librarian at the Y.W.C.A., in Montreal.

1915—Zoe Smith spent the past summer in Europe.

1917—Mrs. G. C. Simpson (Jennie L. Symons, Ph.D.) has been appointed to the staff of Hunter College, New York City.

Mrs. Noel Jackman (May Louise Newnham, B.A. '17, M.A. '21), after an illness of more than eighteen months, is still an invalid with arthritis, but is making a steady recovery. She is with her parents, Bishop and Mrs. Newnham, Rockwood Place, Hamilton, Ont.

1920—Mrs. Norman Young (M. Grace H. Moody) is teaching French in a private school for boys recently established by her husband in Winnipeg.

1921—Eleanor Cox (Music) has completed her training in the Royal Victoria Hospital, Montreal, and is now Matron at a boys' school in Avon, Conn.

1923—Mrs. Jack Beaton (Edith Campbell) has moved from New York City to Toronto, Ont.

1927—Alice Willard Turner, B.A., '27, M.A. '28, who was last session proceeding to a Ph.D. degree at the University of Toronto, has been awarded the Imperial Order Daughters of the Empire National War Memorial Overseas Scholarship for the Province of Quebec for 1929. She is now entering upon a post-graduate course in Mathematical Research at Cambridge.

1928—Margaret Cameron, Med. '28, is engaged in post-graduate work in Europe, and Violet Hulin, Arts '28, is now on the staff of the Montreal High School.

1929—Kathleen Robson, Mus. Bac. '29, has been elected a performing member of the Women's Musical Club of Winnipeg, and will appear at the February meeting. She has established a reputation as a teacher of pianoforte.

Huldah Alexandor is on the staff of the French Department, McGill, and Norah Sullivan, Freda MacGachen, and Ellen Stansfield are on the staff of the English Department.

Regina Shoolman, winner of a Travelling Scholarship in French, and Alice Morton are now students at the Sorbonne, Paris.

Elizabeth Archdale is studying Law at the University of London, and Jane Howard is continuing her studies in English at Somerville College, Oxford.

Ida Greaves is engaged in post-graduate work in Economics at McGill, and Rachel Chait is also in the Graduate School, continuing work in English.

Norah Longworth is in the Statistical Department of Nesbitt, Thompson & Co., Montreal, and Madeleine Girvan is in the Head Office of the Bank of Montreal.

Hilda Gilroy is attending the Library School at McGill, and Olive Basken is in the Department of the Interior, Ottawa.

Polly Wetmore is in Trail, B.C., visiting her brother and sister-in-law, Mr. and Mrs. Douglas Wetmore.

Gwen Roberts is taking a business course in Toronto, and Eunice Meekison has a position with Canadian Industries, Limited.

Ruth Moore is engaged in post-graduate work at McGill, and Jean MacLean is secretary to Mr. Matthews, Assistant Registrar, McGill.

Eileen Peters, Ruth Whitley, Jean Fensom, Margaret Power, and Marguerite Quigley are taking a business course at the Convent of the Sisters of the Congregation, Montreal.

Football in China

(*Continued from page 23*)

but the Emperor replied "We like playing, and what one chooses to do is not exhausting." The Empress was appealed to, and suggested the game of tiddlywinks for the amusement of the Emperor.

From the historians of the T'ang Dynasty (A.D. 618-907) we are told that Emperor *Hsi Tung* (874-889), who was passionately fond of sport, especially football, polo, and cockfighting, put to death a loyal minister for venturing to remonstrate on the subject.

At first the ball, made of leather, was round and stuffed with hair. During the T'ang dynasty the ball was filled with air and its name was changed to *ch'iu*. For playing the game, two long bamboos were set up, several tens of feet in height, with a silken net stretched across, over which the ball had to be kicked. The players formed themselves in two parties; and the game was decided by points.

According to a football expert of the period "to inflate a football seems to be easy, but it is really very difficult. The ball must not be very hard, or it will be too lively, and full force cannot be used in kicking; neither must it be very flabby, or you will have an opposite result, and the ball will not travel when kicked. It should be about nine-tenths full of air; then it will be just right."

Football games in progress are described by various authors. According to one "On the Emperor's birthday two teams played football before the imperial pavilion. A goal was set up of more than thirty feet in height, adorned with gaily coloured silks and having an opening of more than a foot in diameter." The object of each side appears to have been to kick the ball through this opening, the players kicking in turn and points being scored accordingly. The winners we are informed "were rewarded with flowers, fruits, wine, and even silver bowls and brocades, but the captain of the losing side was flogged and suffered other indignities."

In the great Chinese encyclopædia, the *T'u shu chi ch'êng*, consisting of 5,020 volumes, to be found in the Gest Chinese Research Library at McGill, the game is described as follows: "The player who is kicking is placed in the middle of the field, while on his right and left are respectively the positions of those who have not, and those who have already, kicked the ball. Immediately behind the actual player stands the *ch'iao sê*, whose function it appears to be to hand the ball to the captain during the progress of the game. There is also the net-keeper, who throws back the ball when it has failed to go through the opening. The duties of the other attendants are not explained. The score consists of major and minor points, and there is a regular terminology to be used by the players, such as ace, deuce, tray, etc., besides other phrases peculiar to the game."

As regards play, the encyclopædia says "The body should be straight as a pencil; the hands should hang down, as though carrying things; there should be great elasticity of movement; and the feet should be as though jumping or skipping."

Over seventy kinds of kick are enumerated, besides endless elaboration in detail. Kicking is forbidden under eleven separate conditions, which constitute fouls, but no penalties seem to be attached; and all play is to be avoided in ten special cases, such as on windy days, when the field is slippery, after drinking wine, by candlelight, etc.

The names of several great football players have been handed down to posterity; for instance, *Wang Ch'i-sou*, a man of great talents, whose reputation as a mighty player during the years 1119-1126 spread all over the Empire; *K'ung Kuei*, a descendant of Confucius, who is said to have excelled in football; and one, *Chang Fên*, who, at Fukan temple, could kick a ball half as high as the pagoda.

[Prepared from an article by the noted English sinologue, Herbert A. Giles. Cited works are in the Gest Chinese Research Library McGill University].

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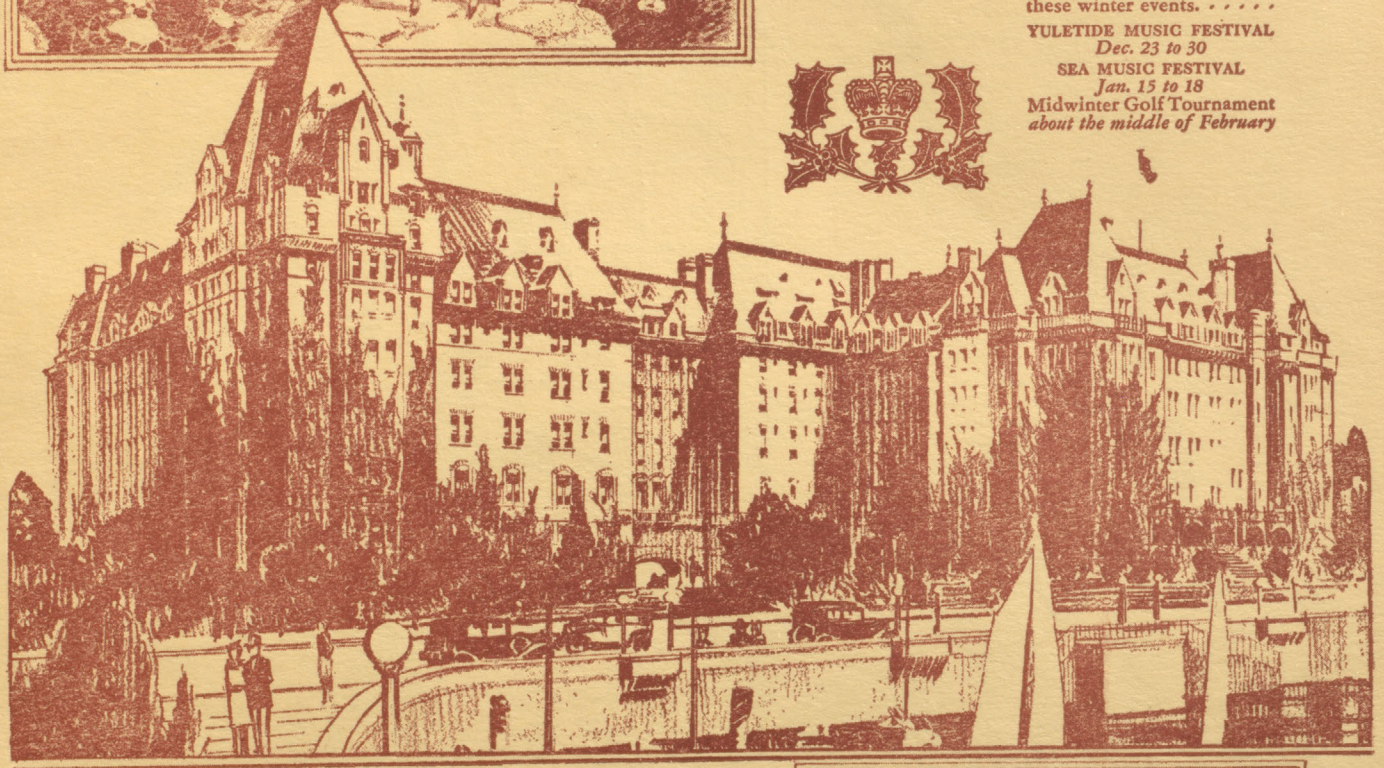
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The McGILL NEWS

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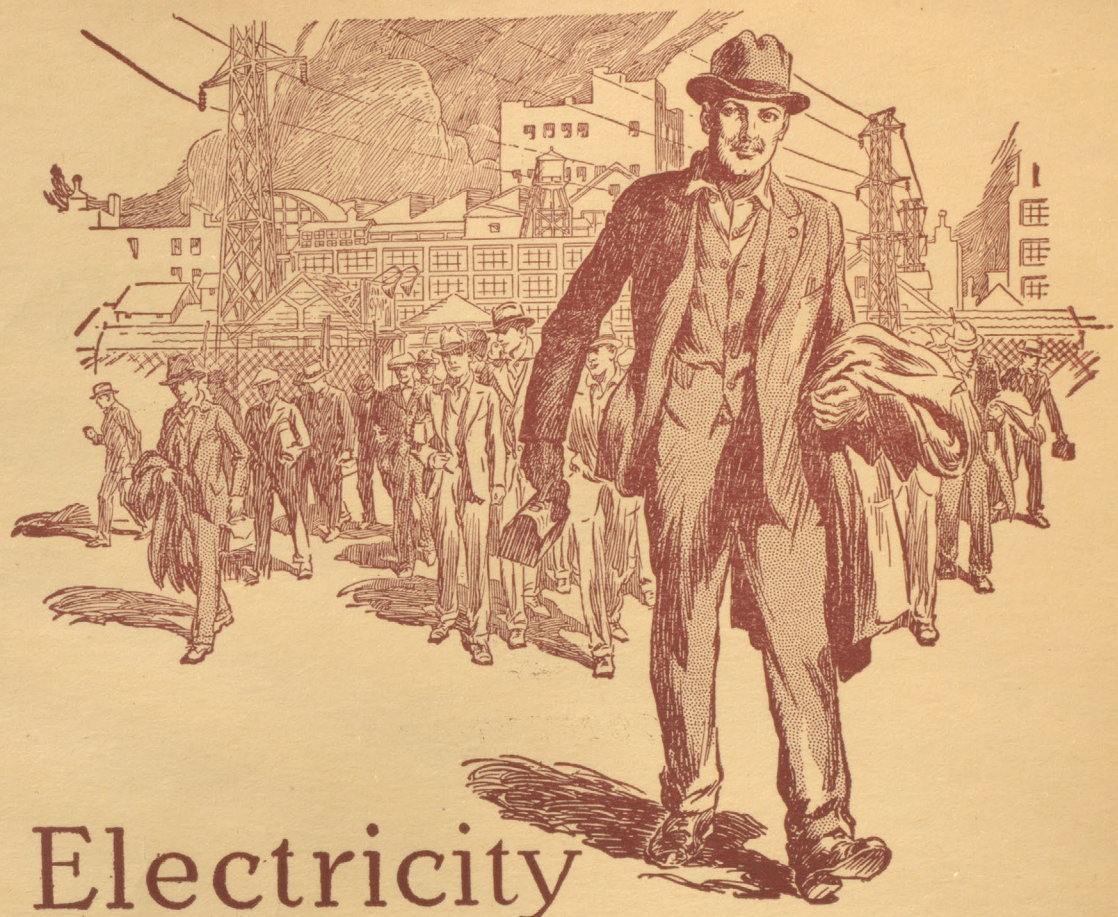
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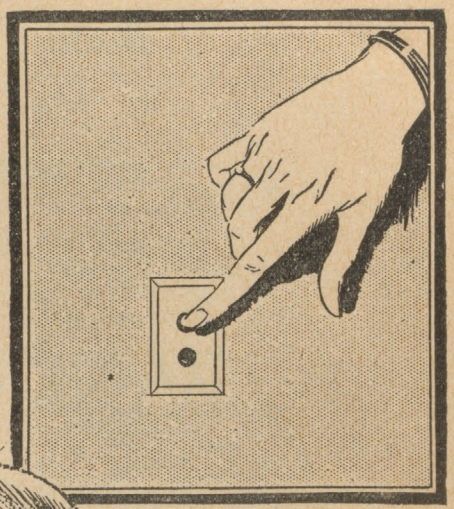
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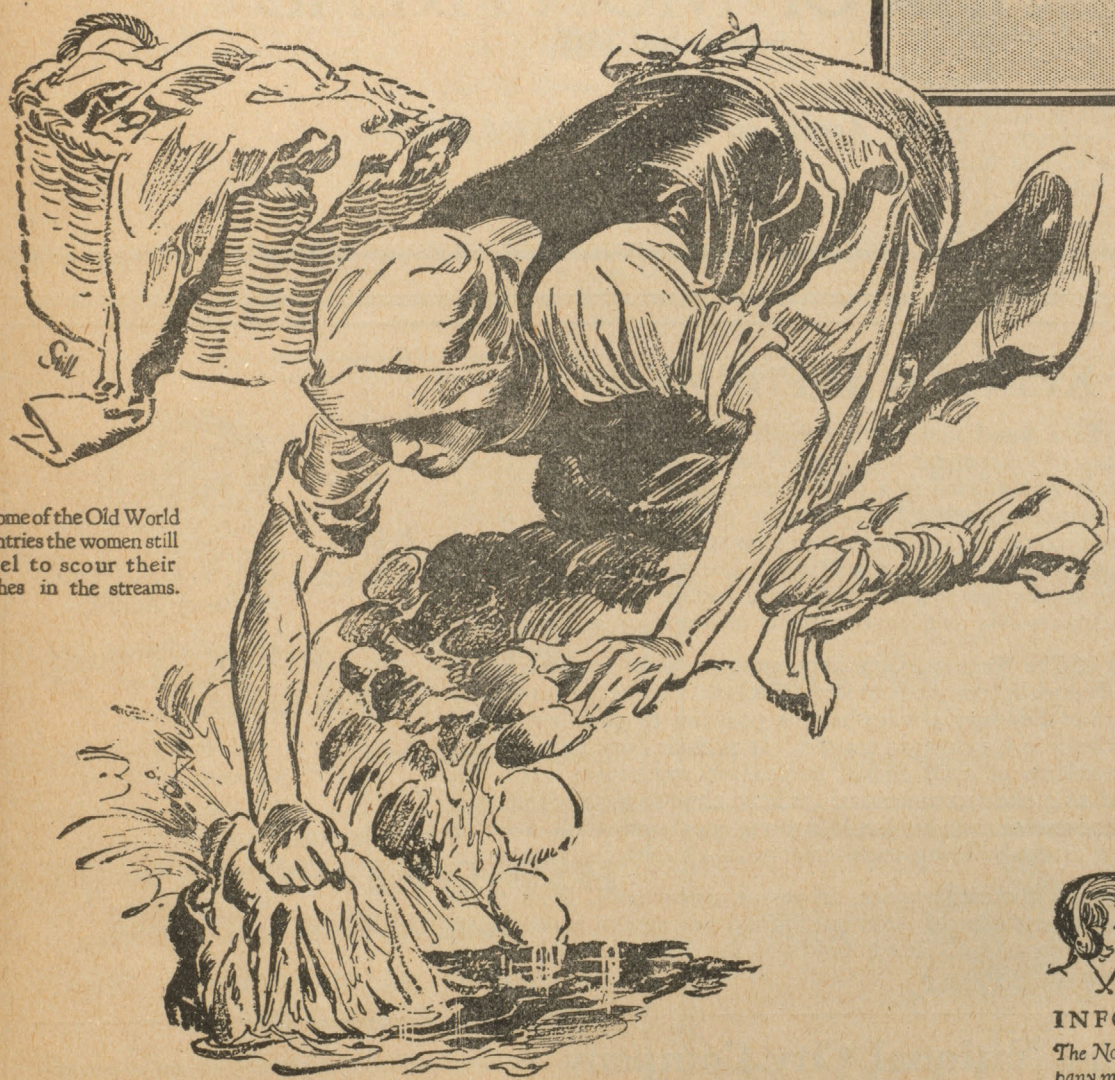
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THE McGILL NEWS

OFFICIAL PUBLICATION *of the* GRADUATES' SOCIETY OF McGILL UNIVERSITY

VOL. XI MARCH, 1930 No. 2

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THE RIGHT HONOURABLE JAN C. SMUTS arriving at Bonaventure Station, Montreal, on January 2nd, to receive from McGill the honorary degree of LL.D. *Left to Right:* J. C. KEMP (Sci. '08), President, Montreal Canadian Club; SIR HENRY THORNTON; GENERAL SMUTS; SIR ARTHUR CURRIE, and COLONEL HERBERT MOLSON.

The Old and New Roads of McGill

An Address to the Montreal Branch of the Graduates' Society

By SIR ARTHUR CURRIE

Mr. Chairman and Gentlemen:

I thank you for the kindness you have shown me in inviting me to this function tonight and for the honour of the opportunity of saying a few words to you. Yet I am, in a way, a graduate of McGill, for I have not forgotten the great distinction given me shortly after the War when I received an Honorary Degree from our common Alma Mater. To be admitted into the fellowship of a University having the prestige and reputation of McGill is indeed an honour and is universally regarded as such. But it is a greater honour to occupy the position which I have held during the past ten years. During that time I have been conscious of many shortcomings, but whatever they have been they have not come about because of any indifference to the responsibilities of the position.

During that period much progress has been made and if the rate of progress has not been as rapid as in other places, or if it has not been as marked as all of us should have liked to see, its slowness or its weakness has not arisen because needs were ignored, or weaknesses unrecognized. Efficiency in a University as in most other institutions can be purchased. I know there are weak places in McGill's organization which should and must be strengthened. There exists in many departments a lack of facilities which should and must be provided. There are gaps which should and must be filled if our Alma Mater is to continue to occupy that place and to

wield that influence in our national life which it is our duty, as it is our pride, to see maintained.

But there is one thing more necessary than any other, one thing without which little progress or success can be achieved—and that is, an objective. The world will always stand aside for the man who knows where he is going. It is also said that the man who travels a straight road will never lose his way. The same can be said of an institution. We must know what we are aiming at, where we are going, and if that road is straight.

To speak intelligently of that road, we must return to its beginning. It was conceived in the mind of a pioneer merchant of Montreal,—and merchants of Montreal have repaired and extended it ever since until now it is a tradition, a pride and a responsibility with them to see to it that the road is in a position to bear every load such a road should bear.

At the time, nearly a century and a quarter ago, when James McGill realized the necessity of founding a national university, there was widespread depression, there were sectional jealousies, there were grave national problems and disturbances, there was need of leadership, need of educated men, men of resource and initiative, to tackle the problems and overcome the difficulties which had to be conquered if Canada, with its open spaces, its widely-scattered parts, its varied interests, was to be made a prosperous and contented country for the different races, creeds and tongues which go to make up the Canadian people. And so, with the vision and the common sense so often characteristic of his race, he made provision for the founding of a University dedicated to that higher education so vital in the building of a nation.

Many men of diverse minds have spoken and written much on the ideals of the true University, but in the last analysis their meaning is the same. "If then," says Newman, "a practical end must be assigned to a university, I say it is that of training good members of society. Its art is the art of social life, and its end is fitness for the world. It neither confines its view to particular professions on the one hand, nor creates heroes nor inspires genius on the other. But a university training is a great, ordinary means to a great, but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at applying true principles to popular enthusiasm, and fixed aim to popular aspiration; at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power, and refining the intercourse of private life. It teaches the student to see things as they are, to go right to the point and to discard what is irrelevant. It prepares him to fill any post with credit and to master any subject with facility."

In our own day, William James, that philosopher of noble mind and sweet and human heart, asked, "Of what use is college training?" And he answered his own question by saying, "The best claim that a college education can possibly make on your respect, the best thing it can aspire to accomplish is this—that it should help you to know a good man when you see him."

There is a much shorter definition of the aim of college education which I like very much, and it is this—"Collede education should teach a man to stand alone."

I recite these things, because I think we must never forget them. Do we bring to bear upon the young and plastic minds of our students such forces and such influences as will guide and strengthen them and give them courage in the great world outside the college? Do we give them a compass that will enable them to sail successfully the uncharted seas of existence? Are we helping them, not only to make a livelihood, but to make a life as well? To acquire commercial success, and also to be good citizens? With what inner capacity for happiness do we provide them, so that they may be alone—and yet not lonely; that they may suffer,—and still smile: that they may be "baffled, only to fight the better": and that they may still have, as Barrie has said, "the roses in the December of their lives."

To accomplish this is no easy task. No institutions have come under such a scathing fire of criticism as colleges and universities. Some of this criticism may be—and probably is—justified, but much of it is grossly unfair. The public too often forget that after all the University is their own institution and that their co-operation is necessary to its success. McGill has not escaped some of this criticism; but I think the criticism is many times offset by the substantial progress made.

First, let me say that much criticism arises from a very positive lack of appreciation of the run-down condition of the University ten years ago. For the four years previous to that date Canada was at war—and McGill too was at war. Professors and students deserted her halls to fight a battle on foreign fields for the preservation and perpetuation of those ideals and standards more readily understood and appreciated by them because of their training here at McGill. Alas, some professors and students did not return. But in the sacrifices they made they added greatly to McGill's imperishable fame. Those left behind gave their best to keep the flag flying at home, but staffs were depleted, libraries were overcrowded, laboratory facilities were not kept up to date, and McGill was sadly ill-prepared and ill-equipped to do justice to the greatly increased number of students who sought admission in the years which followed the war.

A campaign for funds took place, with a most generous response, but let us face the truth; only about half of what was really necessary was raised. Some thought that McGill's needs were satisfied for years to come, but it soon became apparent such was not the case. The building programme planned as necessary had to be very definitely curtailed. The Pathological Building and the Biological Laboratories had to be gone on with, because their erection had been very definitely promised to the Rockefeller Foundation. The Library was extended.

And here, I admit, we made a mistake. I was told that the addition would provide all necessary accommodation for fifteen or twenty years. It was full in five. Then the rush of students to Arts and Commerce so taxed the accommodation in the Old Building that additional space had to be provided. Furthermore, the Old Building was unsanitary, most inconvenient, so criminally dangerous as a fire trap that a single inspection by a committee of the Board of Governors condemned it, and it was rebuilt. The cost of the buildings and extension enumerated, with the necessary endowment for maintenance, used up half the fund subscribed in 1920.

If the other buildings planned in 1920 were deemed necessary then, they are much more necessary now; and the lack of them in the intervening years has crippled our usefulness and made it increasingly hard for us to retain a position of leadership. Let us give but one example. I have heard our Department of Applied Science compared with the Massachusetts Institute of Technology in terms scathingly critical of our School. I have heard it said that not only were we lagging behind, but that we now occupied a "distinctly inferior position."

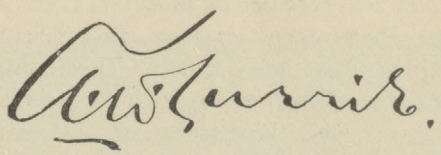
Now I do not object to criticism, nor does the Engineering School; but such criticism and such comparison is unfair and unjust.

Let me briefly outline the departments in each institution, with the number of teachers.

	Massachusetts Institute of Technology	McGill
Aeronautical engineering	17	0
Chemical Engineering (as distinct from Chemistry)	54	1
Civil and Sanitary Engineering and Surveying	20	9
Electrical Engineering	55	6
Fuel and Gas Engineering	5	1
Mechanical Engineering	62	5
Mining and Metallurgy	13	11
TOTAL		
Professorial	110	24
Junior	114	11
Research	51	5*
(* of whom 4 are in Mining and Metallurgy)		
Students, 1920	3,075	646
" 1926	2,260	329

Comparison between these institutions leads nowhere and is largely futile. Let me call your attention to the fact that in Mechanical Engineering alone the Massachusetts Institute has 27 teachers of professorial rank and 28 juniors and 17 special lecturers, or far more than our entire engineering staff. Their investments in buildings and equipment, and their endowment devoted to engineering and allied branches are equal to the entire investments of McGill University. They surpass us in their post-graduate work, because they have many, many scholarships available: we have only a few. But they are not a single whit better in preparing under-





graduates in those departments where we both operate, nor do their graduates hold higher or more responsible positions than ours, nor is the average salary earned by their graduates higher than that earned by ours.

Formerly, McGill's School of Engineering drew many students from every province in Canada. It still does; but we must not forget that in the last fifteen years British Columbia, Alberta and Saskatchewan have founded engineering schools of their own and that fees at McGill and the cost of living in Montreal are both higher than in other places.

Fees in Saskatchewan are	$ 60
Alberta	75
Manitoba	100
New Brunswick	120
Queen's	130
British Columbia	150
Toronto	150
McGill	205

The fact that under these circumstances McGill draws a much larger proportion of its students from other provinces, from other parts of the Empire and from foreign

countries than any other Canadian engineering school speaks for itself.

Nothing that I have said is to be taken as indicating that we are at a standstill or that we are indifferent to progress. In his last report, the Dean, after outlining the increased facilities provided in the last five years, makes this highly enlightening statement: "Although the expenditure was not large, it has resulted in a marked strengthening of the undergraduate work and constitutes by far the most important advance in the material resources of the Faculty in thirty years." Let me say once more that efficiency is purchasable ,and if our Engineering School had greater facilities, more scholarships, and ways and means to add to its staff, there is much that we could do.

I have deviated from my main theme to deal with one specific criticism. Now let me return.

The increases in salaries promised and the additional professors necessary because of increased enrollment involved an endowment greater than the other half of the subscription, and McGill was soon in debt again.

Let me pause here to remark that the debt was not due to either waste or extravagance, the adding of unnecessary buildings, or the creation of new or unnecessary departments.

The other new buildings erected or purchased were:

(*a*) An Electrical Building, the greater part of the cost of which was supplied by Montreal Light, Heat and Power Co., Shawinigan Company, Bell Telephone Co. and Northern Electric Company. That building did away with the old workshops which were extravagant and unnecessary, since the students now receive workshop training in practical work with the industrial companies in the vacation time. The building of the new electrical wing, one of the most economically-constructed buildings on our property, made available much needed space in the Chemistry and Engineering building.

(*b*) The Industrial and Cellulose Chemistry Building constructed by the Pulp and Paper Association. To this venture the University made a substantial contribution and established the E. B. Eddy Chair of Cellulose Chemistry. This association of University and industry led the way and set an example which others have hastened to emulate. I attach the greatest importance to this experiment, so much so that nothing must stand in the way of its being a success. It would be well worth your while to visit the Institute on University Street. There you will find the laboratories of the workers in pure science, and the men seeking the fundamental truths. Research in the fundamentals precedes and underlies applied research; and it must ever be so. Fundamental Research is the University's job, but this does not mean that the University or the University workers must remain indifferent to the actual problems of industry. So, in that Pulp and Paper Institute building, you find also the technical workers, the men who are applying the truths of science to the problems of the industry. These workers are not hermits, each imprisoned in his narrow cell. They co-operate; they discuss their work; they let each other know what they are doing, and what difficulties are encountered. They bring to bear directly on the problems of the pulp and paper industry the truths of science and they test their conclusions in the small but complete mill on the lower floor. I think it is not only a splendid experiment, but an example of sensible co-operation, and I look forward to an extension of McGill's willingness to co-operate with industry.

(*c*) The New Animal House, costing more than $40,000 and entirely paid for by Dean Martin and some friends whom he interested in this necessity.

(*d*) The Field House—a charge on the revenue from the Stadium.

(*e*) The Dentistry Wing at the General Hospital, in the cost of which the hospital shared to the extent of $10,000.

(*f*) The Faculty Club on University Street, the cost of which was largely borne by an anonymous friend. I might add parenthetically that not many University professors can nowadays afford to be members of other clubs.

(*g*) Certain other houses on University Street, all of which pay 6% interest on the investment. It is our policy to purchase additional property when we can get it at a price which enables the rent to pay fixed charges and 6% on the invested capital.

(*h*) The Principal's house on McTavish Street, bought very, very cheaply. And, let me add, the furniture was not supplied by the University, as gossipers, maliciously ignorant, so often contend.

At the time of our last campaign, high hopes were entertained that we might be able to supply:

(*a*) A Mining and Geology Building. We must do so at an early date. We should have had such a building long ago, and we would have had it if it had not been necessary to re-build the Arts Building. But it must be remembered that more than half of the students now in attendance at McGill in Montreal receive the greater part of their instruction in the Arts Building. I think I can safely add that the first building the Governors intend to authorize is the Mining and Geology Building. Plans once prepared are now being revised.

(*b*) A Gymnasium. We have the unenviable reputation of being the only University in Canada without gymnasium facilities. The reason for its non-existence is that we have not sufficient funds,—at least, the Governors feel that the necessary withdrawal from endowment funds to supply a gymnasium would be unwise at the present time. I would like to comment further regarding the gymnasium. I think that the only time I have had the honour of meeting the graduates since our reunion in 1921 nearly ten years ago was to discuss the

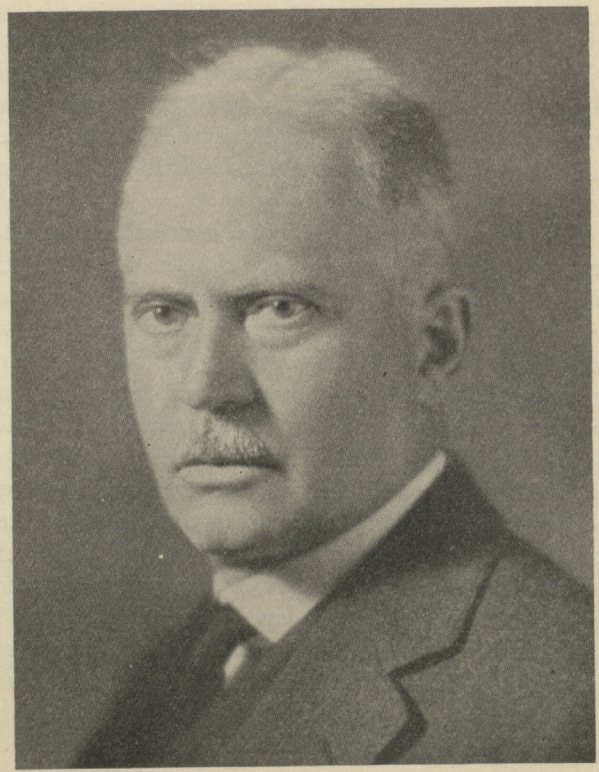
site of the gymnasium. I wish we had never held that meeting. As things turned out, it was unnecessary, and no good came of it. Let me now frankly state that in the light of subsequent events (which I shall not pause now to elucidate) there will no longer be any opposition to the erection of the Gymnasium on Pine Avenue. Sherbrooke Street will be widened; and University property there is likely to be disposed of and the facilities now supplied in those buildings arranged for elsewhere.

And now I come to the question of dormitories. Many of you, I know, are keenly interested in this question and McGill has been much criticized because we have not large dormitory accommodation. I remember a very prominent graduate and friend of mine telling me that the governors had no right to spend a single dollar of the funds provided in the last campaign until dormitories were supplied, and a prominent Montrealer intimated that he would attach a condition to his next subscription that it be used for such a purpose only. We are all keenly interested in dormitories; but, naturally, we have different views. There are throughout the University from 800 to 1,000 students who might live in dormitories. The fraternity system is well established, and many students live in these houses. The Royal Victoria College is being extended; and some students will always live at home. The cost of erecting these dormitories would be great, especially if they are to be comfortable and commodious internally and of a style of architecture consistent with the landscape externally. The question we must ask ourselves is, "In view of the great necessities of the University, would the educational returns be commensurate with the cost, and should other needs remain unsatisfied until dormitories are provided?" We cannot do everything, we can only use our best judgment, in this matter as in everything else. I admit the value of dormitories, especially to universities and colleges in small towns; and I admit also that colleges and universities so situated and so favoured often disclose a greater college spirit than similar institutions without dormitories located in larger cities. But—just what is that spirit? Is it insular or is it national? Is it genuine or is it frothy? I am not prepared to admit that the academic standards in such colleges are higher, or even as high as in some other institutions.

I have seen many dormitories which were cheerless, dismal places. Each room had its two beds, its table, its two chairs, its cupboard, its rude bookcases, its bannerettes. There was no library—a fatal mistake. I have never known a case where there were not complaints about meals. All cheap meals prepared in large quantities usually invite criticism. Who would wish to live long in a cheap hotel? And that is what the usual college dormitory really is. Are the minds and manners of students to be greatly improved by herding them together in the average dormitory? My friend who refused to contribute to anything except dormitories contends that the morals of the students would be improved, at least conserved, by such a life. I doubt that; and the experiences of colleges will confirm the grounds for my doubts. Many dormitories are relics of monasticism, and resemble military barracks.

Friends of the dormitory system nearly always point to Oxford and Cambridge, where college life is the feature. But college life at Oxford or Cambridge is a totally different thing to dormitory life in any University on this continent or to any dormitory life that we could establish at McGill. Let us admit, if you like, that Oxford and Cambridge have something which universities here have not—but we cannot provide that "something" merely by the erection of the type of residence possible here. McGill is not made up of residential colleges, and never can be. American colleges thought residential life would give to them what Oxford and Cambridge had. After thirty years' experience they admit they were wrong. President Lowell of Harvard condemns the ordinary university dormitory and is trying to substitute the Oxford college.

No, gentlemen, the peculiar charm of Oxford is not due to her dormitories but to her storied past; to the memories of her famous men; to her chapels; her colleges, each with its own individuality, where professors, tutors and students live together in high company; to the thoroughly scholarly traditions of the leading colleges; and, not the least, to the work done in the famous public



H. M. JAQUAYS
President, Montreal Branch of the Graduates' Society.

schools of England before ever the students went up to Oxford. You cannot create a university out of bricks and mortar and ivied walls and lawns and playing fields. No merely mechanical re-arrangement of the student body will create a single new idea or a single new sentiment in the spiritual life of the institution.

Nevertheless, it is the firm intention of the Board of Governors to begin, as soon as possible, the provision of dormitories. Just where, is a question. The majority of you will think of Macdonald Park at once. But why not on Pine Avenue, or University Street? The space in Macdonald Park is not unlimited, and if all dormitories are erected there, what becomes of playing fields, the need of which is very urgent? Some have advocated a high dormitory building, but I shudder when I think of such a building—more than ever does the idea of the cheap hotel come to my mind.

I have dwelt rather lengthily on this question of dormitories, because it is one not lightly to be disposed of, and because so many appear to judge our University not by what it has in the way of facilities or by what it has accomplished or is accomplishing now, but by what it has not and by what has been left undone.

There are other material things the lack of which disappoints our friends. We are told we should have a Convocation Hall, another building for our Department of Music, a larger Physics Building, an enlarged stadium, more playing fields, more laboratory facilities, more accommodation for the Departments of Dentistry, Law and Architecture, and greater museum space.

I admit all this, and the bare enumeration of these things will give some indication of the worries of your Principal. But there are other things which worry him more. I am even prepared to place these different necessities in the order in which I think they should be supplied, but there are other things which I think come first.

Great as material needs may be, the need of men ranks first and chiefest. We may have clear in our minds the mission and purpose of a University, we may appreciate the conveniences it should have, we may have our own special enthusiasms and aspirations, but the thing that most gives a university character, reputation, respect, tradition, value and merit is the character of the men and women on the staff. Every university is bound to have mediocrities; like the poor, they are always with us. But how can university training hope to raise the intellectual tone of a community, how can it purify the national taste, how can it cultivate the public mind, how can it train good citizens, unless the training received in a university is imparted by men who themselves are examples of what good citizens should be, men who can not only teach but who can do; men who can inspire and stimulate and develop the minds of the students who enter their class rooms, men, strong and true, whose company is sought, whose counsel is sound, men who are wise and tolerant and just, men who know that no

(*Continued on page 43*)

The Death of Dr. Robert F. Ruttan

On February 19th, Robert Fulford Ruttan, B.A., M.D., D.Sc., F.R.S.C. (Med. '84), outstanding scholar and teacher, died at his home in Montreal, aged 74. As director of the Department of Chemistry at McGill and, more recently, as Dean of the Faculty of Graduate Studies, Dr. Ruttan attained a position in the esteem of his colleagues and in the affection of his students rarely equalled, even among the long line of distinguished men who in varying branches of University work have by their loyal devotion established so securely the name and fame of McGill. Dr. Ruttan's work in this field was outstanding and some account of it will appear in the *News*, we hope, when time permits the preparation of an article less hasty than would be required if it were to appear in this issue. In the meantime, the *News* joins respectfully in the widespread regret which the death of Dr. Ruttan has caused to all associated with McGill.

* * *

A Gift from the Late Dr. F. J. Shepherd

The graduates will be interested to know that the late Dr. Shepherd left to McGill his medical library, medical pictures, and a collection of letters which have a distinct historical value to the University.

The Library is particularly valuable on account of its very complete collection of calendars and official documents of the Medical Faculty, these going back for a number of years. Hospital records, too, are in a very complete set forming a collection almost unique in that respect; and the many letters illustrate forcibly the tremendous influence that Dr. Shepherd wielded both as a surgeon and as an educator. It is to him that the University is indebted for placing our Anatomical Department and its collection of museum specimens and its excellent library in the front rank of such departments. This is well illustrated by a collection recently made of anatomical literature, which comprises a large series of original editions, many beautifully illustrated and dating back four or five centuries. This collection is to be exhibited for the American Library Association at its meeting in Montreal next June, also before the British Medical Association meeting in August. The correspondence, including intimate letters from his old associates, more particularly Osler, George Ross, Fenwick, and R. L. McDonnell, recalls a unique friendship that existed between these four men, a friendship which lasted through many years and despite the vicissitudes of time and distance.

A Discovery of Importance

IN February the Faculty of Medicine of McGill University announced that a remarkable discovery had been made by Dr. J. B. Collip, Chairman of the Department of Biochemistry, from which it is hoped and believed that results of far-reaching benefit to humanity will accrue, as the extract which has been produced offers a remedial agent for certain disorders from which many women suffer. Dr. A. D. Campbell (Med. '11), who has carried out the clinical observations, resulting from Dr. Collip's discovery is quoted in the press as stating "It is hoped that our studies will throw new light upon the problems of ovarian dysfunction and hyperthyroidism, and, in addition, that the study of the ovary-stimulating hormone will help to unmask the ætiology of certain of the so-called toxæmias of pregnancy."

In regard to the announcement by the Medical Faculty, Dean C. F. Martin stated to the press "Professor Collip has succeeded in the purification and standardization of a hormone, or internal secretion, having effects somewhat similar to the anterior pituitary gland. This substance, which has been isolated in crystalline form, has been derived from the placental gland, and is of chief importance because it offers a remedial agent for certain feminine disorders by promoting maturity that has been delayed as well as by influencing in a very remarkable manner the metabolism and general health of the patients who receive the drug. . . .

"The field of usefulness for this drug can hardly be over-estimated, both in regard to the extent of its use and its beneficial effects. The results that have been obtained in the cases treated during experiments are reported to be most remarkable, but the investigators are reticent about declaring as yet the full value of their tests."

Commenting on the discovery, Sir Arthur Currie said, in part: "Everyone at McGill University rejoices exceedingly that complete success has rewarded the long and patient efforts of Professor Collip and his capable assistants in the Bio-Chemistry Laboratories of our Medical School. For weeks we have known of the experiments and were cheered by reports from time to time that success was in sight. . . . It is a remarkable discovery and should bring relief and comfort to countless thousands of women throughout the world. . . . A discovery that gives health and joy and consequent happiness to men and women deserves our everlasting gratitude."

Interviewed by the Montreal *Gazette*, Dr. W. W. Chipman, Emeritus Professor of Gynæcology and Obstetrics, said, in part: "We congratulate Professor Collip on his recent achievement. The clinical application of this new therapy is in the hands of Dr. A. D. Campbell both at the Montreal General and Royal Victoria Montreal Maternity Hospitals. . . . Many cases have already been treated with excellent results."

Dr. James Bertram Collip was appointed to the chair of biochemistry at McGill in the autumn of 1927. He graduated in the University of Toronto in 1911 and proceeded with a graduate course in physiology and biochemistry, receiving his Ph.D. degree in 1914, and later serving for some time on the Medical Staff of the University of Alberta. Returning to the University of Toronto, he was associated with Drs. F. G. Banting, C. H. Best, and MacLeod in the discovery of insulin, and participated in the Nobel Prize awarded for this discovery to Dr. Banting and Professor MacLeod.

Dr. A. D. Campbell graduated at McGill in 1911, spent two years as an interne at the Royal Victoria Hospital, then, after general practice in the west and experience gained as Senior Resident Obstetrician at the New York Lying-In Hospital, served overseas in the Canadian Army Medical Corps for three and a half years. Returning to Canada, he was appointed senior demonstrator in anatomy at McGill and to the Department of Obstetrics and Gynæcology at the Montreal General Hospital. He will take charge of further investigation and application of the new hormone both in the Montreal General and Royal Victoria Hospitals; and it is not too much to say that the world will anxiously await the result of his continued study.

It is a thought agreeable to all Canadians that McGill and, through the circumstance of Dr. Collip's graduation, Toronto University should be associated in a discovery the full value of which will become more and more apparent, it is hoped, in the months and years that lie ahead.

* * *

Honours in the Medical Faculty

In his report on the work of the Faculty of Medicine for the Session 1928-'29, Dean C. F. Martin notes that honours have been accorded to members of his Staff, as follows:

Dr. A. T. Henderson (Med. '13) was invited to give the Harben Lecture in London, England, and Professor E. W. Archibald (Arts '92, Med. '96) was invited to address the Surgical Society of Paris, a distinction that is rarely accorded to men on this side of the water. Dr. W. W. Chipman received the degree of LL.D. from the University of Dalhousie, and Dr. J. C. Meakins (Med. '04) the LL.D. from Edinburgh. Professor Beattie has

been accorded the Doctorate of Science from his own University (Belfast).

A rather unique incident in the history of American medical honours was the appointment of three members of this Faculty as President, individually, of the three important organizations for Internal Medicine, Professor A. C. P. Howard (Arts '97, Med. '01) being the presiding officer at the Association of American Physicians; Professor J. C. Meakins the President of the Society of Clinical Investigation, and Dr. C. F. Martin the President of the American College of Physicians, all in the same year. Professor A. T. Bazin (Med. '94) occupies the Presidency of the Canadian Medical Association and Professor E. M. Eberts (Med. '97) the Presidency of the Inter-urban Surgical Society.

Dr. H. S. Birkett (Med. '86, LL.D. '21) has been appointed a member of the European International Collegium of Oto-laryngology, representing Canada. He has also been appointed an honorary member of the Scottish Oto-laryngological Society and of the American Academy of Ophthalmology and Oto-laryngology and first Gold Medallist.

At the 48th annual dinner of the Faculty held in the Windsor Hotel on February 8th, Professor Stephen Leacock appeared as the guest of honour and was welcomed by the Dean of the Faculty, Dr. C. F. Martin; Sir Arthur Currie, Mr. E. W. Beatty, Dr. W. W. Chipman, about 250 students, and 50 graduates, or members of the University Staff. Professor Leacock, remarking that for thirty years he had been waiting an opportunity to address a medical banquet at McGill, presented a speech in his inimitable manner and, concluding in a serious vein, assured his hearers that in all their splendid work, they might count on the Faculty of Arts for friendly rivalry in maintaining and fostering the proud traditions of McGill.

* * *

McGill Wins Championships

On February 20th, McGill defeated 'Varsity 1-0 in a hockey match at the Forum in Montreal and this result, in conjunction with a 2-all tie played earlier in the season in Toronto, brought to Montreal for the first time in seventeen years the senior hockey championship of the Canadian Intercollegiate Union.

Though space prevents our dealing with this event in the manner we would wish, the *News* takes this opportunity of congratulating Captain George McTeer and the McGill team on the success they worked so hard and fairly to win. We also congratulate the Boxing, Wrestling and Fencing Team and the Gym., Team on the Intercollegiate championships they have brought to McGill.

Mme. Puech Revisits the R.V.C

The outstanding event of the winter for the Alumnæ Society has been the visit of Madame Puech, the beloved Mademoiselle Milhau of earlier days.

Mme. Puech's trip to Montreal followed an official tour in the United States, and she spoke of it as an opportunity to rest and see old friends before her return to France. She was persuaded, however, to address the Alumnæ Society and the students of the R.V.C. With these exceptions, her visit was informal, and in the nature of a home-coming after many years of absence.

Mme. Puech's presence on this side, at a season when she is usually fully occupied in Paris, was due to an invitation from Mrs. Catt, convener of the annual conference on the Cause and Cure of War, held in Washington, and attended by representatives of some fifteen organizations of American women, including the Association of University Women and the League of Women Voters. This year the American delegates numbered 554, and with these, for the first time, representatives of four other countries were associated, Madame Puech, representing France; Miss Courtney, England; Dr. Von Velsan, Germany; and Mrs. Gauntlett, Japan.

Arriving in New York on January 10th, Mme. Puech spent a few days as the guest of Dean Gildersleeve at Barnard College, addressed a gathering of Barnard students, and also the New York branch of the American Association of University Women. The Washington Conference she found a laborious, but exceedingly interesting, experiment. It was carefully organised, and was addressed by several prominent men, among whom General Smuts was outstanding. A deep impression was made by his declaration that the two most important contributions to the civilization of the coming generation would be the emancipation of women and the work of the League of Nations.

After leaving Washington, Mme. Puech visited Philadelphia, Baltimore and other centres, where she addressed groups of University women, the People's Forum in Baltimore, and the Annual Luncheon of the League of Women Voters in New York. These last were large gatherings, that of the League of Women Voters numbering over eight hundred.

Just before coming to Montreal, on January 31st, Madame Puech was the guest of Mrs. Franklin Roosevelt in Albany, where she addressed representatives of the North Atlantic Section of the American Association of University Women.

After so much public speaking, her old home in Montreal seemed to Mme. Puech, as she declared, like a release and vacation. She was, however, extremely active throughout her stay of five days. There were many old friends to be visited, and many former students

(*Continued on page 37*)



A Thermit reaction under the ice on the St. Lawrence River during operations conducted by Dr. Barnes in 1929.

Ice—A Canadian Problem

By Professor Howard T. Barnes
McGill University

[The *News* is greatly indebted to Professor Barnes for supplying this timely article, which, under the title "The Science of Ice Engineering" appeared in *The Scientific Monthly* last October, and for the illustrations, one of which also appeared in *The Scientific Monthly*.]

THE tremendous cost of ice and snow to this country may be summarized as follows: ice jams with disastrous flooding; shutting down and crippling of power plants; closing of canals and river systems in the north; delays caused by the snow and ice in the operation of railways, motor cars and aeroplanes, and the destruction of telephone and telegraph lines from sleet and snow, etc. To save even a small fraction of the loss in these instances would result in many millions of dollars and certainly justifies the attention and study which may be devoted to it.

For the past thirty-five years it has been the writer's contention that a proper scientific study of ice would result in a method for overcoming and minimizing the disadvantages to all northern countries. As the population increases it becomes more and more important to consider these questions, since the full development of the northern areas of the world must depend upon the proper control of ice conditions. While we do not see, at present, any means of altering the climate of the world, we can, by understanding nature's method of ice control, find means for relieving and tempering these facts.

In order to obtain an idea of the fundamental principles of this new science, it is necessary to consider briefly something of the constitution of water and the nature of ice. Röntgen in 1894 was the first to point out that the physical properties of water indicated that it contains ice in solution. It was not until the studies of Sutherland, published in 1910, that a working theory was established showing that the properties of water could be interpreted by assuming that the pure substance known to the chemists as H_2O could exist only in the form of dry steam or vapour; that liquid water was a double molecule or $(H_2O)_2$, and that ice was a triple molecule $(H_2O)_3$, which forms at once as an associative product. Water, then, must be regarded as the mixture of two liquids, the proportions of either depending on the temperature.

As the chemist uses H_2O very freely as a symbol of water, or hydrogen oxide, for international convenience Sutherland gave names to these associated molecules. The simple molecule was called hydrol; the double molecule, dihydrol, and the triple molecule, trihydrol. Dry steam is, therefore, pure hydrol; ice is pure trihydrol, and water as we ordinarily know it is a mixture of dihydrol and trihydrol.

Evidence of the theory of the constitution of water is had from the studies of the density of water, optical behaviour, specific heat and viscosity. Ice in its solid form has a density of 0.9166, and if it could melt and expand without dissociation like a metal, the density of the liquid ice at 0°C. ought to be about 0.88. Sutherland calculates the varying proportions of one ingredient with the other resulting as follows:

0°C.	37.5 per cent. liquid ice
20°C.	32.1 " " " "
40°C.	28.4 " " " "
60°C.	25.5 " " " "
80°C.	23.4 " " " "
100°C.	21.7 " " " "
198°C.	16.5 " " " "

At the critical temperature, which is about 368°C., water must consist of nearly pure dihydrol, or, in other words, the ice in solution nearly disappears at the critical temperature. It seems evident that the melting-point of ice is not a true physical melting-point, but a temperature of dissociation unlike the physical melting-point of other materials.

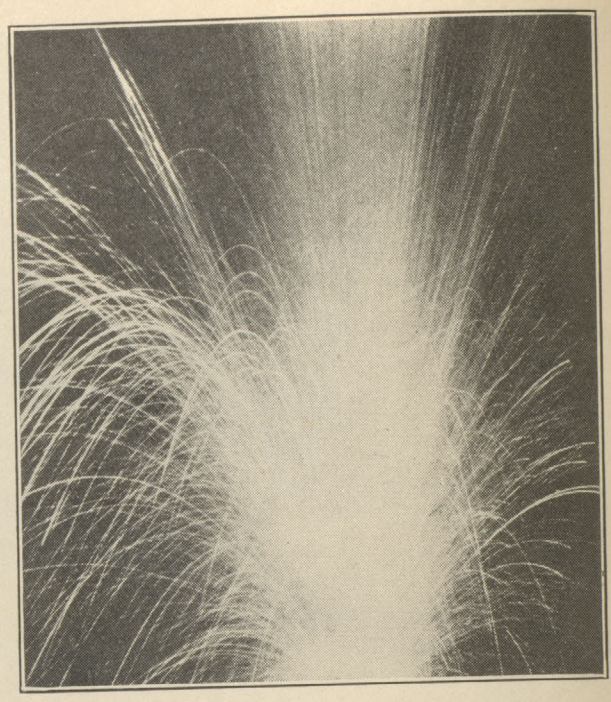
Colloidal Ice

In considering water as a colloidal solution of ice, there is no microscopic evidence to show colloidal ice particles in water at temperatures above the freezing-point. At the freezing-point, however, the colloidal particles of ice form complex groups of sufficiently large dimensions to be distinguished under the microscope. When a fall of temperature takes place, even the smallest fraction of a degree below the freezing-point, the exceedingly viscous particles of colloidal ice rapidly agglomerate and pass to the true ice crystal.

Microscopic photographs of ice particles as they precipitate from the water show that they are disk-shaped and devoid of crystalline form. The particles, if undisturbed, grow into a form similar to a snow crystal. Various forms of ice are met with in nature, all of which have their explanation in this colloidal theory.

Frazil Ice

In all running streams of open watercourses the most troublesome form of ice is known as "frazil." To the waterpower operator it is exceedingly troublesome. With the first cold weather in the autumn when the water comes to the freezing-point there is often a very large and sudden formation of frazil. The explanation of this is exceedingly simple when we realize that the entire body of the stream is nearly 40 per cent colloidal ice before freezing and coagulation takes place, when the temperature of the water has dropped a few thousandths of a degree. This mass of ice rapidly coagulates into streamers and subsequently into lumps and large clots which are carried in the current to great distances. So



THERMIT DISINTEGRATING A BLOCK OF ICE

Two and a half pounds of Thermit destroying a solid 2-foot cube of ice. Phosphorescent ice and heated hydrogen gas are shown rising seventy feet in the air.

abundant is this formation that within a few minutes the whole stream may appear to be loaded with sand. During this time of supercooling these clotted masses of colloidal ice grow rapidly and freeze to any object with which they come in contact.

So delicate is this balance of temperature which determines the sticking properties of this ice that a change of a thousandth of a degree is sufficient to prevent the formation or facilitate the growth of this ice. This delicate balancing of the forces of nature is easily explained when we understand the true nature of the water structure and that the freezing-point of water represents a chemical change rather than physical one.

During the processes of formation the streamers and curtains of frazil ice form throughout the whole body of the water as fog is formed in air. It occurs with the same suddenness as fog and it very closely resembles it. It is dispelled almost instantaneously by the light of the sun and becomes very sensitive to small temperature changes in the water.

The light of the sun produces a direct action on the ice particles as well as an indirect action on them by warming the water. There are two ways that the frazil fog can be dispelled: one is through this direct action of radiant energy destroying the agglomerating properties of these colloiding ice particles; and, second, there is the action of the heat in warming the water, elevating the temperature, and thereby mechanically acting on the particles of ice by melting them. Radiant energy, such as supplied by the early morning sun, will loosen solidly

frozen ice crystals and cause small ice particles to disappear.

Limited Ice-forming Power

Water may be exhausted of its ice-forming power, as has been proved by experiments recently conducted in our Ice Research Institute at Morrisburg, Ontario. In these experiments water in a tank was cooled at a temperature ten to fifteen degrees below freezing. After the expiration of a certain length of time ice was extracted and measured and the water allowed to produce fresh ice for a further period.

An an example of what happens, the result of one experiment showed that the first half hour yielded a full pail of ice. It required, however, a whole hour afterwards to produce another full pail of ice. Two hours more were required to produce a third of a pail. For four hours afterwards no ice was produced. This extraordinary result can be explained on the colloidal theory, but it is difficult in the short space of this article to go into the theory adequately. It is evident that a nucleus is required for the colloidal ice mass, and after exhausting these nuclei, the formation of further ice is rendered difficult. This subject will be treated fully elsewhere.

Warming Water to Obtain Ice

The passive state of water can be explained, also, on the ground that there is a time required for the restoration of the trihydrol in solution and at the temperature of freezing it is considerably slower than at higher temperatures. The active, or ice-forming state of water may be restored immediately by warming the water to room temperature and then cooling, indicating that the equilibrium is established quickly at higher temperatures. We have, therefore, the interesting anomaly of producing ice in water by warming it.

Anchor Ice

Anchor ice occurs in rapids and streams up to a depth of thirty feet, and depends upon the clearness of the water and the rapidity of flow. It is exceedingly sensitive to daylight, and such formations as occur at night are immediately relieved by daylight. This anchor ice is formed in rapids even when the temperature is considerably above the freezing-point. It forms more slowly with greater cooling in deeper water.

Corrrespondingly, the melting of this ice is more rapid in shallower streams on the advent of daylight and during very cold weather the anchor ice may remain for several days on the bottom in very deep streams. Thus, we will have on a river a run of anchor ice in the morning from the shallower parts and in the afternoon from the deeper portions, establishing thereby a very valuable distribution of ice flow in an open stream, for the greater abundance of ice from the shallower portion has passed before the ice from the deeper portion rises to cover the surface.

Surface Ice

The formation of surface ice is a study in itself and can not be fully treated here. Its growth is exceedingly slow after it has achieved a certain depth, and it is interesting to observe the formation of the crystals of this ice by the accumulation by layer after layer of ice disks on the under side very much like stacked Chinese coins. Very old surface ice gradually becomes coarser in structure, owing to the fact that the large crystals consume the smaller ones. This is noticed also in old glacial



An Iceberg being destroyed by Thermit during experiments in North Atlantic waters in July 1926.

snow accumulations. After many years of continual cold the glacier becomes coarse-grained and the snow much more granular in structure.

Factors Controlling Ice Formation

Of the factors which contribute towards the formation of ice, undoubtedly the most important is terrestrial radiation, causing ice growth by reason of the fact that water is a perfect radiator of heat, and in winter loses its heat faster than it receives solar energy. Wind agitation, surface disturbances in rapids and waterfalls, deficient humidity and exposed surfaces all contribute their influence to abstract heat and assist the growth of ice.

Counterbalancing these we have the forces of nature which retard the formation of ice, such as solar radiation, radiant heat, reduction of exposed surfaces, warm rain and high humidity. Light is the most active agent, and it is the light rather than the heat of the sun's rays which is most effective, especially the rays of the rising sun which coming through a clear atmosphere can penetrate deep into the ice and water. As soon as the sun rises in the morning the ice production almost stops, and that which has been formed during the night along the bottom of the river rises and floats on the surface.

Artificial Destruction

In developing artificial methods of ice destruction it has been found that the greatest success has been obtained by methods which are similar to those employed by nature. The exercise of brute force on ice has resulted in a distorted impression of how ice should be handled. By the river-man the use of dynamite has always been resorted to in times of emergency, but it has been found conclusively by expert experimentation that high explosives such as dynamite, T. N. T., black powder and nitroglycerine are of very little value, as most of the energy that is generated is shot up in the air, which merely serves to compact the ice more. While very spectacular in effect, all this energy wasted in the air should properly be used under the ice in destroying its strength.

In 1925 the writer came to the conclusion that heat-producing chemicals such as thermit are more efficiently employed. Thermit, which has come to be known generally in its work with ice, is not in any way explosive, but when properly ignited reacts vigorously, generating very high temperatures and producing extremely hot liquid steel. This heat causes the ice to split into its constituent parts, hydrogen and oxygen, with explosive violence, and thus the energy of the reaction is confined and held underneath the surface. The oxygen is mostly fixed by the iron of the thermit to form oxide again, while the hydrogen is liberated as a very hot penetrating gas which burns in the presence of air on top of the ice in a sheet of flame. Literally the ice blasts itself.

The writer has developed a number of methods of attack which are based on scientific physical study. These methods appear capable of dealing with any ice accumulation, when relief is necessary to avoid flood damage or stoppage of a power-house. No set rule can be given, however, as each problem is a study in itself and requires a particular treatment. The skill of the operator, or ice engineer, is the important factor in its success.

Time is a determining element in ice-engineering work, and remedial measures should be undertaken before the trouble occurs rather than heroic efforts to release an ice jam once it has formed. A quiet safe method of destroying ice in a stream at restricted points where jams are liable to occur results in the disappearance of ice long before the spring breakup occurs.

It is possible even to destroy the ice-forming quality of the water before the ice is formed and thereby keep the water in a passive state, but this new method of ice technique is now being developed and it is too early to say what may result.

Materials Used in Destroying Ice

Besides thermit, which is a mixture of oxide of iron and metallic aluminum, there are other chemicals used in the treatment of ice, such as calcium carbide, calcium chloride, sodium chloride, all of which have a powerful action in rotting and destroying surface ice in the coldest weather, leaving it weakened to such an extent that it offers no resistance to an ice shove. A field of ice can be so treated that definite lines of weakness can be established in any prescribed manner. Young ice can be destroyed in a few minutes, and channels opened in proportion to the economic desirability of such work. Charcoal, cinders, lamp black, sand and gravel are also very useful in their way of drawing the sun's heat and aiding in the rapid destruction of surface ice when correctly applied.

In every case where ice of a river is treated during the winter months by these methods the spring break-up may be hastened at least two to three weeks.

The writer has developed recently a new material called "solite" which can be dropped from an aeroplane over a crucial point in an ice jam. Solite is very effective in treating these congested areas not easily reached. It requires no wires or batteries to set it off and may be delayed to any extent that is required, hence it is of very great use in aeroplane work.

Methods of Attack

Before undertaking a piece of ice-engineering, all information should be obtained by a general survey of the section to be treated; the accumulation of existing data, and comparison with previous records, where they are obtainable; the depth and nature of the ice and the

(*Continued on page 35*)

Memories of Lord Strathcona

By E. HURLBATT

[The Editors feel that some explanation, though no apology, is called for in offering to readers of the *News* two articles on Lord Strathcona within one year. Both were written by Wardens of the Royal Victoria College with the intention of keeping alive for students and graduates of the College some personal impressions of its founder. Miss Hurlbatt's article, which follows, was written soon after Lord Strathcona's death, and filed away until about six months ago, when in response to an enquiry it was offered to the *News*. Meanwhile, Mrs. Vaughan, unaware of the existence of Miss Hurlbatt's pages, contributed the article entitled "Fundator Noster", which appeared in our June, 1929, issue. It is in no sense duplicated by the portrait, drawn from close personal observation, in Miss Hurlbatt's "Memories of Lord Strathcona". That so remarkable a man should be the subject of many and varied sketches is not strange. The *News* Gallery may hold yet other portraits of Lord Strathcona.]

I THINK I must have seen Lord Strathcona at public meetings before I met him for the first time in the winter of 1906. I had been asked to obtain from him information about the College he had founded at McGill University in Montreal. I found him in his office in Victoria Street, London, seated at his desk in a bare, unpretentious room, in an attitude which has been characteristically recorded by Mr. Robert Harris in the portrait that hangs in our Hall—one hand holding his chair, the other resting on his knee—a position that with many people would be an attitude of repose—with him it was compatible with alertness and a keen concentration upon any affair at the moment in hand. This attitude, apart from his white hairs and venerable expression, was the only thing suggesting age—it was as if he gave his body rest in order that his mind should have the use of all his force.

As far as I recall, he told me little of the College he had founded. He seemed to assume that one who knew about colleges and college life would know what must be the general conditions. Also I think he was too modest to describe the nature and extent of his contribution to McGill. So I was left free to gain impressions of his personality. I think that then, and whenever I met him afterwards, I was conscious that his voice revealed his personality. It was resonant and far reaching, almost hard in the way every word conveyed a sense of the power behind it. His tone was even and exact, and it was so when it was kindest and most gentle, or when other signs betrayed his amusement.

In September, 1906, the University of Aberdeen celebrated its centenary, and Lord Strathcona, as Chancellor, was the foremost figure in a great gathering. On the first day, he led a procession through the streets of the city to a temporary hall, erected at his expense. There he received congratulatory addresses from representatives of many universities and learned bodies. There, again, he entertained at dinner the same representatives and all graduates of the University who returned for the celebrations, also representatives of the undergraduate body.

It is easy to recall the persistent voice that succeeded in penetrating to the recesses of that great hall, and to remember details of the scene as, with quiet dignity, he presided over that colossal dinner party. It was my good fortune to be one of the two ladies at the group of high tables (there were, of course, women at the graduate tables, for the University opened its doors to women in 1892) and from a vantage point to watch the face of our host. It was obvious that from the occasion he derived deep and lasting pleasure.

The Aberdeen gathering was a type of many in which our Founder was a central figure: and we have heard from Sir William Peterson how, as Chancellor, he represented McGill at university gatherings in Berlin and elsewhere—always an honoured guest, taking his place with the great by birth, or place, or intellect, or achivement. His part was always to serve some purpose, to represent some great interest—just as, when High Commissioner in London, he never failed to appear when it would serve Canada's interests that he should do so.

He is reported to have said in the last days of his life that patience and work were the best prescription for health. It has seemed to me that with him, to patience and work was added this, at least in his later years, that he was serving others, not striving, working, or planning for himself, but bearing the responsibility of office and authority and, as so often happens, finding stability under that burden.

On a winter's morning, at Euston Station, London, in December, 1906, as our train was leaving for Liverpool, I caught sight of Lord Strathcona mounting the train as it began to move, and there, behind on the platform, was Lady Strathcona, supported by four strong arms, which lifted her so that she could see into the window of the carriage and wave her farewell. The pathos of that figure I shall not soon forget. I heard on the voyage, from Mr. Carson, Lord Strathcona's Scottish Agent, who counted Lady Strathcona as his dear friend, of the anxiety and loneliness that these sudden partings and absences caused her, how Lord Strathcona wished always to have her with him, but how she shrank from the journeys. It was said that when Lord Strathcona decided upon his last visit to Canada in September, 1913, she wished to remain behind, until he gently suggested that there might be for him no returning. That was enough, and we know how she came, on that last visit, an almost miraculous effort at their age.

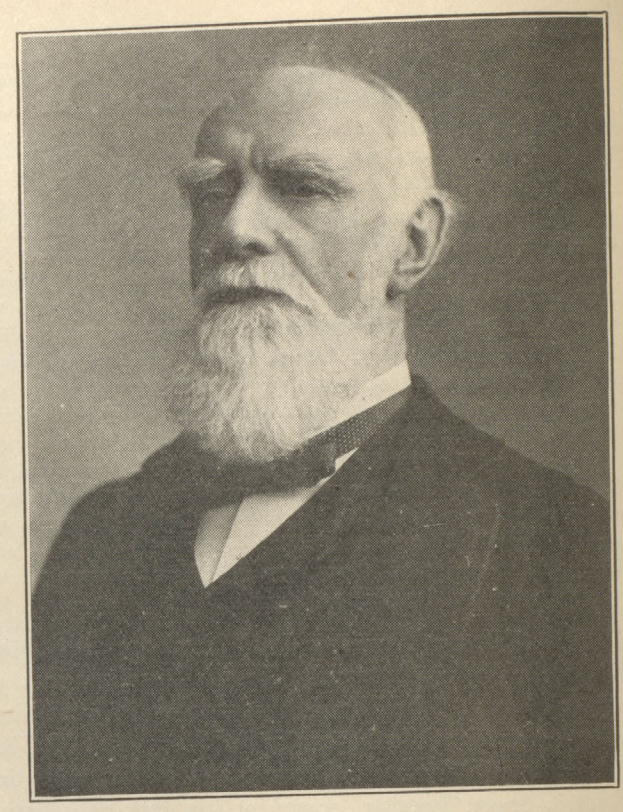
On the journey in December, 1906, and January, 1907, Lord Strathcona remained indoors. He talked of his former crossings and spoke with pride of the present facilities of the voyage. We were on the then new *Empress of Britain*, with Marconi wireless apparatus for the first time installed on a Canadian liner. We spoke of the daily paper that would no doubt soon follow, and which is now, of course, supplied on every big ocean steamer. Lord Strathcona always dined in the saloon, and, I believe, was there as a rule for luncheon, if not for breakfast. He came to the ship's concert and presided, but he would not make a speech. The programme was largely supplied by the ship's company—there were few passengers—and Lord Strathcona was so interested that the ship's company felt it was their entertainment of him and his of them.

On the train during the journey from Saint John to Montreal, there was opportunity for conversation, and for many hours he entertained us in his car, before, at, and after luncheon. Again he sat in the familiar attitude in his armchair, looking out to the rear of the train upon the whirl of snow between the spruce trees, occasionally going to the window when we stopped at some small station, always to find a crowd of people, who gazed and sometimes waved as the venerable figure was recognized.

On that journey he brought out from his portfolio the cuttings from Labouchere's paper *Truth*, of 1885, in which the C.P.R. scheme was denounced as a fraud, likely to be the greatest since the South Sea Bubble. I think he loved to review that old controversy—every milestone on the journey reminded him of efforts made to carry on the work, of hindrances and obstructions that had called up the determination and the will to persist in the path to the work's completion. Although this conversation began at 11.30 a.m., it was nearly dark before I was allowed to go back to my own quarters, and I imagine Lord Strathcona's talk went on until Montreal was reached.

As Sir William Macdonald and Principal Peterson joined in the cheer with which he was started on his way from the Windsor Station to his home in Dorchester Street, I realised that now I should see Lord Strathcona in conditions familiar to his Canadian friends. During his visit, Montreal seemed to have a "Government House" of its own, so conscious did one become that the city suddenly had a centre. Ceaseless activity marked his days, but time was found for everything—to preside at a McGill meeting at the Board of Trade, to visit old friends, and to make new ones.

At his dinner table, as of old, gathered representatives of all Canada's life, so that it was a liberal education to learn from one's neighbour who were the men and women all around. It might be the Governor-General, or a diplomat from Washington, a railway magnate from the United States, or another who had made the C.P.R., a banker, who had the finest collection of French



SIR DONALD SMITH

Lord Strathcona and Mount Royal, Founder of The Royal Victoria College.

Masters on this Continent, a man who carried on the organisation of the Hudson's Bay Company, a man of science, an artist, or a woman leader in philanthropy.

At a later date I again saw Lord Strathcona in his English setting, still conveying the impression of quiet and persistent service, with evidences of his attention to detail and of his retentive memory for what seemed little things, but which really revealed his infinite consideration for others. Still later, an example of this occurred in London when he was more than 91 years of age. After a strenuous day and before a most strenuous night, he spoke to me by telephone to remind me of Lady Strathcona's Dominion Day reception to be held that night, to be assured that I had received an invitation, and to inquire whether friends with whom I was staying had received an invitation also—all this in his own voice over a London telephone!

Of him it may truly be said that his hospitality knew no bounds. His Dominion Day receptions and his garden parties in Hertfordshire brought thousands of guests. His dinner parties, apart from colossal functions like that at Aberdeen in 1906, or from those on Dominion Day, were apt, even in his private houses, to exceed at the eleventh hour the proportions originally intended.

In the summer of 1909 Lord Strathcona paid a long visit to Canada with two of his grandchildren. They travelled from coast to coast, made many side expeditions,

and arrived in Winnipeg, so that he might act as host while the British Association for the Advancement of Science held its meeting in old Fort Garry, the scene of so many years of his labour. On arriving at night, he was received with civic honours, and was preceded by a torchlight procession to Government House, where he stayed. I was invited to await him in the station. A college graduate, who went with me, modestly withdrew a little way when the train came in, but Lord Strathcona noticed that there was another woman's figure there, and together we pursued the retiring graduate, until he could greet her!

During that week at Winnipeg (grown from a settlement of 120 people to a city of 130,000 in his time), he revisited old scenes and met old friends. There is a story that at one time Winnipeg failed to return him to Parliament, and afterwards there had been some coolness. At least, he had not visited the city again for long years. But whatever may have occurred in the past, there was no stint in the measure of friendship he gave in 1909. He was, of course, the picturesque personality of that great gathering, of which the two most notable scientific figures were Sir J. J. Thompson and McGill's ex-Professor, Rutherford.

On the first morning of the meeting, Lord Strathcona overtook me and insisted upon my going to one of the meetings in which he had a special interest. There he spoke for some 20 minutes; then we went on to a military review; then to the unveiling of a tablet upon the only remaining vestige of the old Hudson's Bay Station—the gateway of old Fort Garry—now standing in a small public garden opposite the new station.

He dined the British Association and the British Association dined him, and on all occasions he made reminiscent speeches, full of point and interest, holding the attention and winning the enthusiastic admiration of the men of science who heard him.

But of all the memories of that week, two stand out most kindly in my recollection. One is the memory of a garden party, given by Mr. and Mrs. C. C. Chipman at Lower Fort Garry, a few miles out of Winnipeg. Mr. Chipman was then the Chief Commissioner of the Hudson's Bay Company in Canada, and made the old fort his summer home. The house stood within a walled enclosure with four protecting towers and two strong gates.

It was in that house that Lord Strathcona was aroused one night to learn that Louis Riel with an armed escort had arrived from Upper Fort Garry and demanded an interview. Riel had come to defy the English authority and to ask for terms that would never be conceded. Lord Strathcona took us to the very room where he had been sleeping, and told us that he had hurried down, taking time only to seize his boots and a thick counterpane, which he hastily threw round him. Riel left before daybreak—"riding silent and preoccupied back to Fort Garry, his dreams of power broken," says the guide book, but this is not historically correct. The first Riel Rebellion was in 1870, and it was probably at this time, or just before it, that the incident mentioned occurred. Riel subsequently withdrew into the United States, but led a rebellion again in Canada in 1885 and was hanged at Regina.

The second memory of that week in Winnipeg is one of the most touching incidents I can recall of Lord Strathcona. He invited to a garden party at Silver Heights, his old home, all the members of the British Association, every man and woman in Winnipeg whom he had known in the days of his residence there, or their children and grandchildren. The house at Silver Heights had been burnt down and the garden had become a wilderness; the lawns and pathways had to be mown like a field of hay, but the old man, with his grandchildren, stood under the shelter of some small shrub-like trees and discharged the duty of real hospitality—to receive his friends on his own territory. Unforgetable is the sight of his familiar figure, surrounded by young and old, rich and poor, tired workingmen, wives and mothers with toddling little boys and girls, and old men with wrinkled faces and clothes that spoke of struggle, not of affluence. And he so evidently happy and eager, recognising faces of the old, and names and stories of the young.—That was indeed a sight to be treasured in the memory all one's days.

The remainder of his visit to Canada that summer was filled with meteoric flights to the West, to Ottawa, to Toronto, and to New Brunswick—with rare days in Montreal. During one of these expeditions, a visit to the Okanagan, he incurred what might have proved a serious accident to a man of his 88 years. A wagonette and pair of horses overturned down a hill and shot the occupants, including Lord Strathcona, out onto the bank and field. The driver, I think, had his two legs broken. Lord Strathcona, however, was unhurt, excepting for a cut and a strain of the hand and arm, which he carried in a sling for some weeks afterwards.

It was during those days that he came into the College and asked to be shewn the "least advantageous" room, remarking that it was usually easy to see the best. He was concerned that we had so few study bedrooms, and told me that he had given instructions for the College to be built to accommodate 100 students in residence. It was then that I took him to the Library and corridor windows and shewed him the Learmont House and its garden. He subsequently gave them to McGill for the College, so that we now have the property up to University Street, and as far back as to the coach-houses and lane.

Mid-September saw a few students again in College, and all who were there went to bid him farewell at the Windsor Station. He spoke to us all, seemed pleased at this simple attention, and we watched him, as the train withdrew, standing on the platform at the rear of his

(*Continued on page 36*)

The Graduates' Society records with deep regret the deaths of the following Alumni:

AKERLEY, DR. ARTHUR W. (Med. '00), on January 30th, 1930, at Point Caroline, Somers, Montana.

ANTHONY, DR. XENEPHON L. (Med. '95), on November 29th, 1929, at Spokane, Wash.

BROWN, DR. J. L. (Med. '79), on July 11th, 1929, at New Hamburg, Ontario.

BURROWS, DR. GARFIELD CAMPBELL (Med. '15), on December 6th, 1929, at Atlantic City, N.J.

CALDER, GEORGE F. (Arts '85), on February 3rd, 1930, at Lachute, Que.

CALLENDAR, HUGH LONGBOURNE, LL.D. '98, in London, England, on January 23rd.

CHISHOLM, DR. MURDOCH (Med. '79), on December 29th, 1929, at Halifax, N.S.

CULLEN, DR. WILLIAM HERVEY (Med. '02), on January 28th, 1930, at Ogdensburg, N.Y.

GREENSHIELDS, JOHN GORDON (past student), on December 18th, 1929, at Danville, P.Q.

GUTHRIE, NORMAN G. (past student), on December 1st, at Ottawa.

HOWARD, WILLIAM HENRY (Sci. '83), on January 26th, 1930, at Salt Lake City.

HUTCHINSON, DR. JOHN ADAMS (Med. '78), on January 24th, 1930, at Montreal, P.Q.

JOHNSTON, DR. FRANCIS EDMUND LEWIS (Med. '96), at Perdue, Sask., on November 29th, 1929.

LEWIS, DR. JOHN TAYLOR (Med. '94), on October 2nd, 1929.

MACLEAN, Dr. John Neil (Med. '98), on December 10th, 1929, at Sarnia, Ontario.

MCKENZIE, REV. DR. WILLIAM ALEXANDER, D.D. (Arts '81), on January 19th, 1930, at New Carlisle, Que.

MOFFAT, JAMES WILLIAM (Sci. '84), on October 28th, 1929, in Toronto, Ontario.

MONTGOMERY, GEORGE ARCHIBALD (Sci. '00), on January 29th, 1930, at Jopplin, Mo.

MUNROE, DR. HARRINGTON BENNETT (Med. '03), on December, 1929, at Santa Monica, Cal.

ROBINS, DR. SAMPSON PAUL (Arts '63, M.A. '68, LL.D. '80), on February 9th, 1930, at Montreal.

ROSS, GEORGE (Sci. '75), on November 1st, 1929, at Kamloops, B.C.

STEVENS, WILLIAM HENRY (Arts '79), on February 4th, 1930, at Lindsay, Ont.

In the quarter since the last issue of the *News* was published, the Graduates' Society has received notification of the deaths of a number of McGill's well-known alumni. Last July, Dr. J. L. Brown died in New Hamburg, Ontario, and in November, Dr. Xenephon L. Anthony, a prominent consultant in ophthalmology, died, after an illness lasting five months, at his home in Spokane, Washington. Only a few days later, Dr. J. Neil MacLean died at the General Hospital in Sarnia, Ontario, where he had established a practice after working for a number of years in Saginaw, Michigan, and later serving with distinction in the Canadian Army Medical Corps overseas. Dr. A. W. Akerley, a distinguished physician and loyal graduate of McGill, died at Point Caroline, Montana, on January 30th, and was later buried with full military honours in Arlington Cemetery, Washington, D.C.

Dr. Murdoch Chisholm, who died in Halifax in December, was another medical graduate of McGill, who, during a long career of more than fifty years in practice, had worthily upheld the traditions which the University seeks to foster. Dr. W. H. Cullen, in Ogdensburg, N.Y.; Dr. G. C. Campbell, in Atlantic City, N.J., and Dr. H. B. Munroe, in Santa Monica, Cal., were physicians whose work added to the prestige which McGill has always enjoyed in the United States.

In Canada, medical circles were grieved to hear of the deaths of Dr. F. E. L. Johnston and Dr. J. T. Lewis. News of the death on January 24th of Dr. J. A. Hutchinson, one of the most respected of the senior physicians of Montreal, was also received with widespread sorrow and regret.

The Faculty of Science also lost a number of prominent graduates, notably G. A. Montgomery, who is remembered in Montreal as a member of McGill's hockey team in the late 'nineties, George Ross, who died in November at his home in Kamloops, B.C., J. W. Moffat, whose work on the economical utilization of the iron ores of the Province of Ontario has been the subject of many scientific articles and brochures, and W. H. Howard, whose work in the separation of silver from zinc founded a process now known all over the continent. The Rev. W. A. McKenzie, D.D., a graduate in the Faculty of Arts, a famous athlete in his college days, and more recently a well-known minister of the Presbyterian Church in Canada, is another alumnus of McGill whose work has commanded widespread recognition and universal respect.

In addition to graduates, the University deplores the death of two past students, J. G. Greenshields, a partner in the investment firm of Greenshields & Co., Montreal; and N. G. Guthrie, well known as a barrister, a writer of verse and drama, and as a critic. Not long before his death, he published a brochure on the poetry of Archibald Lampman which was widely recognized as one of the most understanding and sympathetic studies of its kind.

In February, Dr. S. P. Robins, a famous educationist and former principal of the McGill Normal School, died, aged 98, in his home in Montreal; William H. Stevens in Lindsay, Ontario; and George F. Calder, formerly principal of Lachute Academy, Mayor of Lachute, and Registrar of Argenteuil County, died in Lachute, P.Q., being survived, amongst other direct descendants by his sons, James C. Calder (Arts '23) of Montreal, and Dr. John B. Calder (Med. '18), of Brantford, Ont. Some ten days before Mr. Calder's death, Hugh L. Callendar, Professor of Physics at the Imperial College of Science and formerly Professor of Physics at McGill (1893-1898), died in London, England, his death causing a loss in the ranks of original investigators that will not be easy to fill.

SUPPLEMENT

TO

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Impressions of Africa

By

Francis E. Lloyd

IN the following I venture to offer to readers of *The McGill News* some of my impressions during a recent trip to Africa with The British Association for the Advancement of Science which met at Cape Town last summer.

Leaving Montreal in May, I spent three weeks in the Old Country before setting out for Cape Town. Landing at Southampton, I visited University College, where I gave a lecture and where also I had an opportunity to study some tropical species of *Utricularia* cultivated in the greenhouses. Professors Mangham and Watkin and Mr. A. E. Clarence Smith were very cordial, and gave me much assistance.

At Cambridge, where I was to lecture at the Botany School, I was the guest of the Master of Downing College, Professor A. C. Seward, and his delightful wife. A week-end enabled me to see the place at some leisure, and I was properly impressed. I then visited the University of Leeds, particularly, of course, the department of Botany under Professor J. H. Priestly, and saw there the evidence of vigorous teaching and research done under trying circumstances.

From Leeds I went to Dublin, where I spent a couple of days as the guest of Professor H. H. Dixon, one of the ablest plant physiologists of the present time. Both Professor and Mrs. Dixon had been at my home in California some years ago, and the renewal of our acquaintance was very delightful. They have wonderful greenhouse collections in connection with Trinity College. The moist genial atmosphere of Dublin is very favourable for vegetation, and one sees things growing out of doors which otherwise would be expected only in almost tropical countries. The greenhouse collections are very fine indeed.

My next stop was Belfast, where I visited Professor Small, head of the Department of Botany of Queen's University, a very vigorous and original teacher, where I was divided in my social allegiance between the families of my colleague, Dr. John Beattie, and of his wife. One of the things that I learned and duly appreciated about the north of Ireland was that they take cream in their tea.

At Manchester I visited my University, as I call it, since I was born within a stone's throw of Owen's College, now Manchester University, the original gift of a Welshman of whom I am now perhaps foolishly proud. I was unfortunate in not meeting my old friend Professor Weiss, and had to hurry to London to catch my boat for South Africa. This boat was one scheduled to stop at the Canary Islands, Ascension and St. Helena, and I got a great kick out of seeing these far flung volcanic islands.

The Isles of the Blessed, as the ancients called the Canary Islands, are impressive, and the great volcanic peak on the Island of Tenerife took the

mind back to the time of Ptolemy who wanted it to be regarded as the geographical beginning and end of everything on the face of the earth; but so far as that is possible the honour has fallen to Greenwich, not a very great difference, expressed in terms of longitude.

The next sight of land we got was at Ascension, a volcanic island with only one green spot on the shoulder of the main peak. Otherwise it is as dry as a bone, but furnishes a beautiful example of a young volcanic island. It is controlled by a Cable Company, and they are frightfully jealous about letting anyone go ashore. One could, however, really see the island better from the ship.

Our next stopping place was St. Helena. The Governor of that island had come aboard at Ascension, and his Excellency was gracious enough to cable to St. Helena to arrange a trip over the island while the ship lay at anchor for Dr. and Mrs. Dreyer, who were with me, and myself. Like the Canaries and Ascension, St. Helena is volcanic, but comparatively old, evidences of extensive erosion being everywhere present. The vegetation is tropical and contains a considerable number of endemic species, a few of which were pointed out to us by our guide, Mr. Bruins-Lick. We, of course, saw Longwood, and were much interested in the holes in the velours whittled by Napoleon to enable himself to peek out at his entourage playing games on the lawn. It appears that he had acquired a retiring disposition at this juncture. I had been particularly curious to know for myself something of the climate of St. Helena, because Ludwig attributes to Napoleon a particularly noxious opinion of it. Precisely the opposite is true. I suppose he would reply, if he could, that climate isn't everything.

On our arrival at Cape Town we were met and cordially looked after in every way by Mr. D. S. Waugh of the United States Rubber Co. During the next two weeks I was able to see the surrounding country under the most comfortable conditions, as the guest of Mr. Waugh and of the Consul General for Czechoslovakia, Mr. Thomas Duffek. Although it was the South African winter then, and the glorious floral array of which South Africans rightly boast was not in evidence, yet the number of shrubs in flower was astonishingly large, proving that the winter climate of the Cape Peninsula is much milder than that of Montreal.

The endemic vegetation of this part of the world is made up of shrubs of various sizes, armed almost invariably with very stiff and thick foliage of the type of our northern heaths, but presenting a much greater variety of form and appearance. The heaths themselves, speaking botanically, occur in a great array of remarkable species and these, with the Proteas, furnish the most remarkable presentment to the botanist that one can imagine. Of the latter we have none in America, they being Southern Hemisphere old world types. A local amateur botanist, Mr. T. I. Steer, has very kindly presented to the department of Botany at McGill a fine collection of photographs of these beautiful plants together with a magnificent large picture of Table Mountain. Climbing up Table Mountain on the west side is no joke, but as I was very anxious to find a certain plant, *Utricularia Capensis*, growing in its native place, I managed to make the top, starting at about 11 o'clock and getting down at half past six. I discovered afterwards, of course, that there is an easy way up, but it was too late to use it.

During the five weeks which were to elapse between this time and the meeting of the British Association, I lectured before the University and Rotary Clubs in Cape Town, and before the local Photographic Society, showing them some of the motion pictures made in my department. I then used the rest of the time in making a trip into Southwest Africa, now under British mandate. This involved an eight-day journey on the railway, which I undertook to enable me to see for myself the extraordinary plant known by the Hottentot name of *M'tumbo*, discovered originally by a German Botanist, Welwitsch, in Southern Angola, and now named after him, *Welwitschia mirabilis*. This is one of the plants which every botanist of the world would like to see growing in its native habitat; and since I could do this with no greater effort than sitting for eight days in the train and a motor ride of 40 miles, I made up my mind to take the opportunity, and fully repaid I was. The plant grows about 40 miles from the town of Swakopmund, just north of Walvis Bay in the Namib desert, where the rainfall is exceedingly low, in fact as low as half an inch or less a year. One drives out over the arid gravelly desert, crossing the bed of the Swakop River in which there is a vegetation of tamarisk, and a sort of wild tobacco, and with curious dune plants along its margins. With the help of a local farmer, I found the spot and saw a few widely scattered M'tumbo plants in an otherwise complete desert. The best popular description I can give is to say that at a little distance the plant looks like two or three pairs of old green overalls tied together and weighted down by a stone, with the legs scattered about in various directions; the stone represents the low irregular stem of the plant, and the legs represents the broad ribbon shaped leaves. The most curious thing about this plant is the fact that it has only two leaves which persist during its life—as fast as they grow at the base, they wither away at the top. On account of its rareness and unique character, the government protects the plant against demolition by imposing a fine of £500 per plant if dug up; I thought it better on the whole to avoid legal complications.

From there I went towards the extreme southeast and visited the home of my colleague, Professor Dreyer, and enjoyed the opportunity of seeing Boer farms in the Boer community near Ft. Beaufort, where I gave a lecture to the school children. On the way back to Cape Town, I visited the Snake Gardens at Port Elizabeth, where Dr. Fitzsimon does his important work of isolating the venoms of the different kinds of poisonous snakes. I was allowed to go into the snake pit and there demonstrated my scientific aplomb by taking two pictures of cobras on the same plate. I then returned to Cape Town to attend the meeting of the British Association, during which I read papers and gave a number of lectures. In co-operation with this Association and the local Natural History Society, I had two absorbingly interesting experiences; one, when I lectured for two solid hours to a room packed with people sitting on the steps and on the floor so that I had scarcely room to move about, and the other at the town of Malmsbury in the Biascope, as they call it, jammed with people to the door. Everywhere I went I met with the most warm hearted appreciation, and it was a real delight to give pleasure, and I hope, instruction to my hosts. I spent two or three days in the Botanical Department of the University in Cape Town, where, with the cordial co-operation of the Staff, and especially of Dr. E. L. Stevens, I was enabled to

work for some time on *Utricularia Capensis*. At Cape Town I was the guest of the well-known local botanist, Mrs. Frank Bolus, and to the cordial hospitality of Mr. and Mrs. Bolus I attribute much of the pleasure of my visit. One afternoon General Smuts, himself an enthusiastic botanist, dropped in for tea and botanical talk.

The second part of the British Association meeting was held in Johannesburg and thither the whole bunch moved by train, the botanists, however, spending a day *en route* to visit the interesting Karroo Gardens, a project at White hill. Professor Compton was our guide, and here we saw many kinds of those succulent plants which are characteristic of the semi-arid Karroo Desert. One wanted to bring back several packing cases of them, as they travel well and grow nicely in greenhouses, but I had to content myself with some photographs of some of the most striking ones. We went, of course, to see the diamonds at Kimberley and the gold mines at Jo'burg, as it is locally called. Most interesting in this connection is the labour system, by which I mean the impounding of thousands of natives in compounds during the time they are under contract to work. These natives are Zulus, Kaffirs, etc., many of them being fine looking people with usually very fine physiques. In Jo'burg my movements were facilitated by the kind hospitality of Mr. H. D. Gumbley, and some of his associates in the United States Rubber Company.

Our next stopping place was Victoria Falls, and I am tempted to enter upon a discussion of the relative beauties of Victoria Falls and Niagara as so many people are, but I refrain. I venture only one remark, namely, that if we could see the whole of the Victoria Falls at once as we can Niagara, we would be looking at a higher and broader fall. The interest of the Victoria Falls is otherwhere than in mere size. We were on Livingstone Island, where four species of *Utricularia* were found (this is the plant wherein my major interest resides at present) and saw the tree on which Livingstone (it is believed) cut his initials. *En route* of course, we stopped at the Motopo Hills at Cecil Rhodes' last resting place, and saw in this locality, near Bulawayo, very interesting vegetation with big succulent *Euphorbias*. After that we saw the country about Salisbury, visiting the Gokomere Roman Catholic Mission, interesting because here many evidences of pre-historic cultures are to be found, including Bushman's paintings and stone implements of various kinds. Just as we were about to leave, the eminent French prehistorian, the Abbé Breuil, appeared upon the scene. The moment he got out of his car, he went off to the prehistoric sites. He is a man of extraordinary intelligence and vitality, and it was an inspiration merely to watch the man talk and expand on his favourite subject.

Next we visited the well-known ruins of Zimbabwe, where we found the ethnologist, Dr. Caton-Thomson, investigating. Already she has published her preliminary account maintaining that these extraordinary ruins, built of trimmed stone without binding material, are probably of Bantu origin, and are dated somewhere in the region of 800 or so A.D. It perhaps lends an aura of romance to the matter to point out that all kinds of stories are told about these ruins, in some of which King Solomon and the Queen of Sheba are *dramatis personæ*.

We got some good botanizing, Dr. Rendle, my travelling companion Professor Marie-Victorin of the Université de Montréal, and myself having a delightful day examining the vegetation of the Chibipopo, a more or less turbulent stream a few miles away, where again I found some very interesting species of *Utricularia*. From here we went to Beira, where we took ship to Zanzibar and then to Mombasa. We had two days in Zanzibar, where we were guests of the Sultan. Since there were 100 of us in the party, there must have been no small job to provide a luncheon *al fresco* which the Sultan very graciously did. We drove through miles of clove trees and cocoanut palms and drank as much cocoanut water as we could hold, examining acres of cloves in the drying and having an altogether delightful time. On the second day we were free to examine the town and surrounding country, wandering through the native villages, attending native dances, and learning a couple of words of Swahili. One of the most interesting features of the town are the heavy doors of Arabic design studded with great bronze bolts, and we were told that these metal adornments were intended originally to prevent elephants from breaking down the doors. I do not vouch for the truth of the story, but I do know that many of these doors were sold to, and removed by American tourists, until a law was enacted in prohibition. Otherwise, I suppose, they would have all gone by now.

On our arrival at Mombasa we were entertained by officials and citizens at luncheon, and were driven about the town and at night left by train for Nairobi, the centre for all big game safaris. We spent a whole week in Kenya as guests of the Government, and if there is anything they didn't do for us during that time, I have yet to find out what it was. I believe that I did buy my own photographic films.

In Nairobi we were very kindly looked after by Mr. A. J. Smith of the United States Rubber Co. who drove Victorin and myself out on the open veldt where we saw gnu, zebra, wart hogs and giraffes. If we had not been careful we might also have seen lions, but in consideration of our families at home we thoughtfully avoided these interesting animals. We saw many Masai, a rather light complexioned people, with a distinctly Nilotic strain. The other natives of this vicinity are the Kikuyu whose attitude towards work is, I understand, quite different from that of the Masai who rather disdain the white man, their disdain taking the form of unwillingness to work for anyone but himself, and this means, of course, that the privilege is delegated to his plural wives.

A night journey from Nairobi took us to Kisumu on Lake Victoria. The Government Officials took us by motor launch to the other side of the Gulf on which Kisumu stands, and here we had a chance to see a native tribe known as the Mavirondo. These are stalwart blacks whom we found fishing in the shallow waters bordering an immense papyrus swamp, either from curious canoes made of slabs of various sizes bound together by papyrus ropes, a description of which we find in Herodotus, and from a sort of boat or raft made of the stems of the papyrus, and which we may, I think, properly suppose represents the prehistoric papyrus boat of the Egyptian. The papyrus boats represented on the walls of the mastabas of Ti and of Ptahhotep of the fifth and third dynasties at Saggrara are nothing but a glorified form of the same thing. The papyrus swamp above mentioned gave us a hint of what the Sudd

in the upper reaches of the Nile must look like. The papyrus is now extinct in Egypt, where in pre-dynastic and dynastic times it was important also among other purposes as the material for making paper.

Returning to Mombasa we took ship to Port Sudan, where Professor Victorin and I took leave of our British Association travelling companions, and started on the first leg of a trip through Egypt, Palestine, Syria, Turkey and Asia to Constantinople, thence to Prag and at length to Brno. As botanists we were, of course, absorbedly interested in Egypt as a country, not to mention, of course, the monuments of antiquity of which it would be quite superfluous to say anything.

From Port Sudan we went by train to Atbara and from there to Wadi Halfa. It was during this trip that we had a real look at the Nubian Desert where live the Bicharin, or, as Kipling picturesquely calls them, the "fuzzy wuzzies." Taking boat at Wadi Halfa, two days were consumed in reaching Shellal. During this voyage (we tied up at night) we saw passing before our eyes the whole panorama of Nubian culture on the banks of the Nile. At Abu Simbel we became acquainted with Rameses II and his charming wife. He certainly put it over on the Nubians when he built these wonderful rock temples for himself and his wife. Although the Nile was in inundation, we could still see a part of the narrow cultivated strip of land on either hand beyond which the edges of gaunt Nubian and Libyan deserts stretch away into the sterile distance. The numerous Nubian villages of mud-baked brick houses are the present descendants of generation after generation of similar ones stretching into the unmeasured past, they are silent, if one may say so, but eloquent reminders of what the basis of Egyptian, and, therefore, perhaps of all civilization was 6,000 years ago, for it seems hardly likely that during this trifling period of time there has been much change. I had the great good fortune of being able to visit one of these villages a few miles above Shellal. The inhabitants, women, old men, and children (the men were away working in various places as is their habit) were indescribably filthy, and the women loud-mouthed and shrewish, especially the elders. In such houses as stood open, I could see nothing but a water jar and a few trifling accessories.

On arriving at Shellal we were fortunate in being able to see the Temple of Philæ fully exposed; in time the entire Temple will be flooded with Nile water when it will be only very occasionally seen, if at all. The real Egypt begins at this point, and the amount that you can see, given inclination, time and money, is overwhelming. The most impressive thought to which a botanist should be peculiarly sensitive, is that on this narrow strip of country no greater than Belgium, from the small agricultural beginnings of a "food producing" people in distinction to "food gathering" people, has developed the indescribable complex which we call civilization: the beginnings of which derive from the happy fortuity of the inundation with its effect upon plant growth and in the desiccation of the human body in the desert sands. I speak of the doctrine according to Elliott Smith. Whether this view will be judged right or wrong, there is a marvelous story about a civilization, if not all civilization in the happenings during 10 millenniums let us say, on this strip of "black land" framed by the "red land" of the deserts.

At Aswan the Nile gauge on the Island of Elephantine described by Strabo is to be seen, testimony of the way the brainy people worked wonders for the

Fellahin. I am not sure that I sat on the same step looking on the Nile Guage on which Strabo did, but my photographic results were superior to his. There are plenty of impressive sights here, the great Barrage, the old Pharaonic quarries and all kinds of other monuments of the past, but much more awaited us at Luxor and farther north. At the Temple of Karnak we stood at the beginning of the way of the dead looking down the central colonnade of the Temple across the Nile to the Valley of the Kings where, when they "went west," they were placed to await the Resurrection. This experience held us spellbound and is a living memory. From here we were ferried across the Nile to Thebes and thence to the Valley of the Kings, calling on our return on Dr. Nelson, in charge of the Chicago house of Archæology, where we caught a glimpse of the remarkable work being done by the Chicago School on the Ramesseum. We incidentally discovered how the camel got his long neck when we saw one feeding on an acacia tree after the manner of the giraffe. Not being a zoologist, I touch on this subject with temerity.

At Cairo, we visited the laboratories of the Department of Agriculture, and I had the pleasure of seeing where Dr. W. Lawrence Balls did his work on the physiology of the cotton plant at the time I was prosecuting similar researches in Alabama. Of course we saw as many of the monuments as time would permit, especially at Memphis and the Saqqara; it was here we found the wall drawings showing the papyrus boats above mentioned, one of the drawings almost exactly representing the papyrus boats used on Lake Victoria today. Intensive cultivation has wiped out all the papyrus from Egypt so that it is not now, as it was then, the greatest paper making country in the world. How much modern civilization derives from the papyrus plant would be difficult to say.

At Cairo again, the great Museum claimed a half day, and there we stood spellbound examining the tomb furniture of Tutankhamen. An overnight journey from Cairo took us to that city set on a hill, Jerusalem. To reach this eternal city the train follows the old caravan road to Megideh and so to Damascus, along the "fertile crescent." A branch line takes us to Jerusalem, and from it we saw Sampson's cave, the place where David stood when he killed Goliath, and the exact spot where that unfortunate King received his congé, but still more interesting were the evidences of terrace culture becoming more and more pronounced as we ascended toward Jerusalem. On these terraces, which turn the steep hillside into level garden patches, cultivation has gone on since time immemorial. The land here and about Jerusalem, and, of course, the Valley of the Jordan, flows with the milk and honey of historic suggestion as largely as it appeared to flow with literal milk and honey to the Israelites tired of wandering in the deserts of Sinai. Of the city of Jerusalem I dare not speak in detail, but I suggest that Mr. A. Edward Newton in the current (February) issue of the *Atlantic Monthly* has done this job to exactly my taste, I therefore quote him so to speak in full. I may say, however, that I keenly enjoyed wandering about the narrow and perhaps somewhat smelly streets. The more camels and asses came along and the more crowding and clutter of man, beast and merchandise, the better I liked it. The food on sale was "extra special" in modern parlance, thoroughly good and cheap. In our wanderings we found an Arab Carpet School and spent half an hour learning how to make the knot.

On another day we did the wilderness of Judea behaving in the canonical fashion visiting the Dead Sea, which we found quite dead enough, the Jordan where John the Baptist is supposed to have trod, and where we were inclined to quote the Gentleman from Damascus who said, "Are not Abana and Pharpar . . . better than this?" It was a very hot day, and we gladly drove to the frequently adjectivated hotel at Jericho, on the way seeing some of the black tents of the Bedawin, and a caravan of camels, asses, and families, led by a woman on horseback. The vegetation here is known technically as halophytic, and includes the remarkable species of milk-weed (*asclepias*) which bears the apple of Sodom. We were not at Jericho long enough to throw any light on the method of conquest of that city by the immigrant Israelites, but it may contribute to a solution of that problem to know that the walls were probably constructed of sun-dried adobe bricks. For all our puzzled skepticism we left Palestine with regret.

From Haifa to Tripoli our road girdled the shore, and we glimpsed the ancient city of Tyre and Sidon and any number of ancient monuments. There was much evidence of silk culture by the wayside in the form of mulberry orchards. From Tripoli by train to Constantinople, where among other things we saw a collection of those wonderful boats, the Caiques, used by the Sultans, known only to a few, and which tourists scarcely ever see. The Sultan's Kioskes in these boats are marvels of inlaid gold and precious stones, and recall the work of dynastic times in Sumer. The wonderful Chinese porcelain to be seen in the Seraglio is probably the best collection in the world.

Three more days' journey brought us to Prag and Brno, where at the invitation of the Czechoslovakian Ministry of Education, I gave two lectures at Masaryk University and two at the Charles University (Prag). I was the guest for 10 days of the Masaryk University at Brno, and, as all botanists should, made a pilgrimage to the Monastery where dwelt the great Gregor Mendel, whose work on a little patch of ground in the Monastery close laid the foundation for modern genetics. On one Sunday, Professor and Mrs. Ulehla took me to visit the Church where John Huss preached, and we saw the great show of Moravian peasants in their national costumes going to and coming from church. The rest of the time was spent hard at work on a piece of research in co-operation with Dr. Vladimir Moravek, at Masaryk University.

BOOKS

*The Legacy of Sun Yatsen by Gustav Amann**

WRITTEN with enthusiasm, this book never quite escapes from a note of luxurious melancholy. It is the writing of a tired man rousing himself to produce a volume on a subject in which he is genuinely interested. It is the author's stated purpose to present an impartial, consecutive account of the Progress of the Nationalist movement in China since the death of Sun

* The Legacy of Sun Yatsen by Gustav Amann. Translated from German by Frederick Philip Grove. Carrier. 300 pages. Illustrated. $3.75.

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The Mind of Canada

An Address to Students

By

Dean Ira A. MacKay

I HAVE called my subject "The Mind of Canada". I wish at the beginning, however, to say with some emphasis that I do not intend to speak in any loud or boastful manner. The problems which the people of this country are facing now, and those which they may be forced to face in the future with even greater courage, are far too vast and far too difficult to be discussed in any boastful way. The future stability and unity of this Dominion, its position in the British Commonwealth, and its status among the nations of the world are not, I suggest, by any means as clear and certain as we sometimes think at present. In any case there is nothing more unbecoming and dangerous to any nation than a loud and boastful national spirit. Indeed, this is one of the great causes of international hate and war which writers on that subject too often overlook. I mean the practice of international boastfulness and bad manners. I hope that Canadians may always be big enough and proud enough to avoid that practice.

At the outset then, let me say that my philosophy of history may be summed up in a creed of one article. I believe that every nation comes to pass in order that it may make some distinctive contribution all its own to human history. A nation, a state or a community—whichever word you choose—is really a large and loosely organized group of persons, living within well-defined geographical metes and bounds, and working together loyally on the great task of human history. Any nation or empire, therefore, no matter how colossal its wealth or vast its possessions, which fails to make a contribution all its own to human history, has lived in vain. Nothing, however, I should point out, seems to depend upon the size of the nation, that is, upon the extent of its dominion or the number of its population. Ancient Rome was a mighty dominant empire; Ancient Greece a small, loose federation of village communities; and yet each of these nations made a splendid contribution to human history; but the contribution of Greece, if not the greater, was certainly the more beneficent. Wonderful little Greece! I sometimes fear that if we forget the lesson of ancient Attica we shall lose all. Plato among the ancients saw the great end and ideal of human history more clearly perhaps than any other. The Mediæval Schoolmen, also, saw it in their own way and they called it the *Civitas Dei*, the City of God. All truly great statesmen and scholars of the past have seen it and have tried to lead their country men thither. The real question, therefore, which every true Canadian must answer is the following: Does this new nation at the present time show any clear suggestions, any clear indications, that it is likely in time to make a distinctive contribution all its own to human history? Unless we can answer that question in the affirmative, all our faith is vain and all our national

optimism no more than foolish boasting. I wish, therefore, to point out to you a few very salient evidences why I believe that we have a right to answer this question in a confident affirmative.

Canada is a vast strange country. There never has been anything like it hitherto in history. There is no doubt about its uniqueness. Draw a line along the northern fringe of settlement from the Pacific Ocean northward over the Peace River Valley, south and east across the Prairies to Fort William, eastward through the long forbidding, barren corridor north of the Great Lakes, north and east through the wildernesses of Ontario and Quebec, and then south and east along the Maritime Provinces to the Atlantic coastline, and you will recognize at once what I mean. How can these be the metes and bounds of any abiding, compact nation of people loyal man to man from sea to sea? Compare this geography with the geography of any other country such as the United States, or France, or Germany, and answer me if we have not problems here which should give us pause, problems perhaps which may put our loyalty to one another to the utmost human stretch in the future. Indeed, I do not think that loyalty to one another and loyalty to Canada will carry us through, unless we also complement these loyalties by some larger faith, some larger vision of our national destiny.

The true symbol of Canada is the trail. The people of Canada are really a nation built along a highway. Or perhaps we may describe this country most fully as a long land-lane in that vast network of communities and communications hitherto called the British Empire, or, shall we call it, the Appian Way of the British Commonwealth of the future. In any case I suggest that if you take this Dominion out of its Imperial background, you will find it very difficult to discover any clear principle upon which to account either for its past history or for its future destiny. Loyalty to the Commonwealth, therefore, may continue to mean much more for our own national stability and unity in the future than we sometimes think in these days of piping autonomy.

I am really not interested here, however, in geography, except so far as geographical conditions may throw light on human conditions and on human problems. I suggest, however, that people who live along highways usually have some peculiarities all their own. They are, for example, usually friendly people. They usually have a warm and genuine welcome for all their visitors. They are also apt to be restless people. They like to travel abroad among other peoples. When they come to the land's end they take to the sea and carry on trade and commerce with other nations. Perhaps the highway or trail which I am now describing really begins at Liverpool and ends at Hong Kong. People who live along highways are not likely, in any case, to be what I sometimes call people with a township vision. They see too many strangers coming and going from near and far to be locally minded.

I suggest now that all the peculiarities I have named are true of the people of Canada. That the people of this country are a free, friendly, kindly people, everyone knows who has made the trip from ocean to ocean. That they are a restless people, too, is evident from the fact that since the beginning of their history they have moved steadily westward until the centre of population may soon be near the foothills of the Rockies, where the long trail meets the cross-trail from the south to the Peace River Valley. That they are not a

people of township vision is perhaps, I suggest, their most marked characteristic. We do not as Canadians, I think, ever make the mistake of supposing that our country is the centre of the universe. We do not, I hope, very often make the mistake of supposing that our country is really greater than any other country. We do not, I also hope, believe in making laws and customs tariffs for the exclusive advantage of our own people to the greater disadvantage of other friendly nations. We should like to think that one nation may be helpful and generous to another nation, just as one individual may be helpful and generous to another individual. The vastness of our own domain, our affection for the Motherland, our allegiance to the whole round Commonwealth, and our unfaltering friendship for the people of the United States of America have all helped in the past to save us from all these symptoms of a narrow national spirit. In this larger life, too, I am convinced we are resolved to live in the future.

We are resolved to live, I am sure, on terms of the utmost peace and friendship with our kinsfolk and only neighbours, the people of the United States of America. That is not a question of national policy with us at all. We choose, rather, to regard that obligation as a categorical imperative. It is the duty of every nation to live on terms of peace and friendship with its neighbours. I believe that the people of these two neighbouring nations will become more and more friendly in the future. That they will become more and more alike in customs and manners is, I think, inevitable. That there will always be large migrations of capital and labour south and north over the long dividing line is, I think, also inevitable. I do not think, however, that this means annexation. I believe, on the contrary, that it will prevent annexation. Why should not two similar peoples live side by side in friendship? It is the differences and not the similarities between neighbouring nations which lead to those hatreds and hostilities which usually end in annexations of territory. This continent is clearly far too large, anyway, to be covered successfully by a single political entity. The work of administration would be far too unwieldy. I suggest that it may be more probable that the whole continent become more differentiated in the future into several partly or wholly autonomous friendly spheres of influence. The real trouble, as we know, with our international philosophy derived from Europe in the past has been that we have proceeded on the suppressed assumption that neighbouring states are necessarily hostile, jealous entities. That is the classical theory of international relations. As soon, however, as we drag that primitive, uncivilized, savage assumption into the light of clear criticism, most of our international difficulties soon begin to suggest their own solution.

I am convinced, too, that the people of Canada are also resolved to maintain, and to strengthen, if need be, their position in the British Imperial Commonwealth. The *idée* of a commonwealth of all nations and creeds and colours of men living in friendship and freedom within the compass of a single policy, loyal to a single sovereign, is an *idée* which makes a strong appeal to all our people. I believe that the dissolution of the British Commonwealth would be one of the greatest disasters that could happen to human history at present. There are far too many small hostile nations in the world now. The net result of the great war, for example, has only been to create a bigger Balkany all the way from the Bay of Biscay to the China Sea. I may

add, too, that there are also at present too many huge, amorphous, unwieldy nations like Russia, China and some others. What the world really needs most of all at present is more friendly families of nations like the British Commonwealth. That is the only way by which the seeds of positive peace may be sown among the nations. It is futile, after all is said, to expect all the nations of the world to begin immediately loving one another all at once, and I fear that far too much of our peace policy, and some of our peace pacts at the present time, are really based on that futile assumption. Negative peace leads nowhere. Negative peace is like empty space and cannot, therefore, possibly provide any sure foundation for lasting international friendship. Until the world realizes the truth of the little creed I have given here, that the nations of the world are all really, each in its own way, working on the same task, the civilization and happiness and culture of all mankind, we shall never have positive peace and, until we have positive peace, we shall never know whether tomorrow may bring peace or war to any of us.

I fear that I am now drifting far from my subject, but perhaps not so far as you may think. You know the quality of the academic mind, how it struggles sometimes for months or years to catch a glimpse of some clear vision or to define some clear truth and then, the struggle over, the result seems so simple and obvious as to be scarcely worth the effort. I am trying, therefore, this afternoon to think aloud to see if I can discover what worthy part this country may play in the new day of peace among the nations which we all hope is coming nearer. Let us look, then, at a few general propositions from Canadian history.

In the first place I should like to point out that Canada is the first nation in history to achieve national independence by wholly peaceful means. Just pause for a moment, then, and think what that may mean! The people of Canada are free at the beginning of their history from all ancient grudges. Bitterness and hate are not in our blood. We do not need to hark back to any wretched revolution or war to find the faith that is in us. If the world, then, is now at the beginning of a new age of increasing peace, as we have had nothing but constant and cruel wars in the past, the people of this new country may have a far greater part to play in the future drama of history than we can possibly imagine at present.

I suggest *en passant* that the fact I have just mentioned is the real reason why Canada has thus far been so loyal to the League of Nations. There are some, I know, who sneer at the League of Nations. But let them examine themselves. The framework of the League may be poorly designed. Its draftsmanship may be defective. The original model may not have been well chosen. The idea of the League, however, is eternal and no nation can long afford to sneer at that. The real trouble with the League is that it is not spectacular enough. That, however, is inevitable. The proximate cause, the *causa causans*, of every war is always some trifling incident. It is the duty of the League, therefore, to prevent these incidents arising, or to get rid of them by any means in its power when they have arisen. That is all the League can do, and that is never a spectacular duty. Blowing out matches is never a spectacular performance.

In the next place I should like to point out that Canada is the first nation in history to be set up by deliberate design. All other nations have come

about, for the most part, in the course of human migrations and wars. The United States of America is no exception to this rule. The United States came about as the result of a huge migration from Europe to this new continent of America. No sooner had these searchers after a new home and a new land touched the Atlantic coast than they formed up in a long frontier line and galloped across the Prairies and the Mountains at almost incredible speed in search of material wealth. It was only with the greatest difficulty that peace, order and good government followed in their footsteps. But the founders of Canada designed a nation in a wilderness. They drew the plans and laid down the specifications in 1867 and we have been following their plans and specifications ever since that time. What golden, incorrigible dreamers they were!

There were, however, as we know, at the time many able statesmen and writers who said that these plans were fantastic and impossible. Among them was Professor Goldwin Smith of honoured memory. Goldwin Smith pointed out that Canada had no geographical unity, which was obvious enough. He also pointed out that Canada had no economic unity, which was also obvious enough. He pointed out, further, that Canada had no racial unity, for how could two races, like the French and English, separated, as they were, by all the ancient grudges of Europe in race, language, religion and tradition, live together in peace and friendship within a single state? Goldwin Smith pointed out, finally, that Canada had no historical unity. The people of the Maritime Provinces came from Scotland, the people of Quebec from Old France, the people of Ontario from the United States of America, the prairies were really wholly uninhabited, perhaps uninhabitable, and the few people who lived on the Pacific coast, beyond the Wall of the World, were only a few adventurers and quite inaccessible. How then, he asked, could it be possible to set up a successful, enduring State without these four corner-stones? I have always had a high respect for Goldwin Smith and I think now that, if I had been capable of thinking in his day, I should have agreed with his conclusions. Goldwin Smith was an historian and he could find no precedent in history to account for Canada. He quite overlooked, however, as historians quite frequently overlook, the power of human vision and high resolution to overcome great natural difficulties. I think, too, that he quite undervalued the strength of British patriotism and loyalty to the Motherland in this country.

In the next and third place, I should like to point out that Canada is really the first country to begin its history without having any reservoir of slave or native labour to draw from in order to do its hard pioneer manual work. Neither is the United States any exception to this rule. The United States had slave labour until very recent times; slaves *de jure* in the South and slaves *de facto* in the North. The rise of the labour movement, however, has happily made an end of that. The relation of master and servant has already gone the way of the relation between master and slave of former days. The day, indeed, may come very soon, when we may have to sweep our own offices and dust our own desks and be proud to do it. Canadians, therefore, must solve this problem of capital and labour, employer and employed, at its very base if we are to build in the future on a sound, scientific foundation. We cannot any longer permit these two classes to carry on constant warfare at

the expense of the rest of the community, else the claims of religion, education, literature, science and all true happiness will be set at naught in this new land at the very beginning of its history.

I need scarcely say that what I have just said is the real reason why the problem of immigration is of so great importance to us in Canada at present. I wonder, however, how many of us have the slighest idea about this problem. What is it, I mean, which prompts men to migrate in large masses in the first instance? Why are some peoples nomads and others peasants? The economic answer that men always move along the line of greatest promised material wealth is, I think, entirely inadequate. I suggest that fine churches, good schools, pleasant homes, kindly faces and welcome hands have much more to do with these movements than we sometimes think. What the immigrant is really looking for is better social conditions for himself and his family. I believe, therefore, that the Universities of Canada should pay more attention to these social problems than at present. The education and training of teachers, public health, human conditions in the industries and on the farms, the blending of races always so different in their interests and occupations, vocational guidance: all these and many other similar questions are of fundamental importance to us now. And these problems cannot any longer be left to haphazard. They are becoming tasks for the trained, tireless, expert students and workers and the Universities must provide these trained workers. We cannot afford to waste energy or work of any kind in Canada. Our supply of labour is too limited for the task before us. Each man must find the work he can do best, enjoy most, and be allowed to carry on that work under the best possible conditions. That should be our aim.

We are also greatly in need of more scientific workers than we have amongst us at present in Canada. I believe that a community interested in science and nature would be a great community to live in, even if its workers in science never added a single penny's worth to its material wealth. We need, however, more men who can turn the providences of nature to human account in this new land. Not that the old will be forgotten. Science never forgets. Science never discards the old. It only revises it, perfecting its truth in clearness and utility as it proceeds. Science touched by human interest and human sympathy is the most beneficent agency in all human life. Look at it how you will and you will find that to be true. Call to mind, for example, the sciences of human communication by rail and road, by sea and land and air, by wire and subtle ether, and you will see at once how important these sciences are to the people of this Dominion and of the larger Commonwealth separated far as we are from one another. Let me venture to make the following sweeping statement. I believe that the future unity and happiness of the British Commonwealth will depend scarcely at all upon constitutions and customs tariffs and almost wholly upon the education of its people, the application of science to industry and to social conditions, and upon loyalty to one another in every way. I am not a doctrinaire freetrader. I do not want to be doctrinaire in anything. I prefer to be fair. I believe, however, that it is the duty of every nation to protect and encourage its basic industries. And by a nation's basic industries I mean those industries so related to their corresponding natural resources that they can, if given a fair chance, produce commodities of good quality and at a low price, alike for the benefit of its

own people and the people of other nations. I think, however, that we always place far too much emphasis upon political agencies. Political agencies have really very little influence upon educational and economic conditions. The future success or failure of this country will, therefore, depend mainly upon its educational institutions and upon its industries and therefore upon the men who command them, and if I have any word to offer to our business men. I should say: "Forget Wall Street and invest your money in promising Canadian industries."

Permit me, however, before I close to enter a plea for mine own best love. Permit me to make a claim for literature and the arts. We sometimes assume, I know, that literature and the fine arts have no economic value, but a very simple argument will show that that assumption is entirely false. Let me state the argument in the following form. In the ordinary course of industry and trade it is always the purchasing mind that controls the market. If there were no purchasers there could be no producers. If the skilled workman produce a fine article for sale, he must also find a purchaser to pay for it. It is in vain, therefore, that we train our craftsmen to produce commodities of high value unless we also create a community of sufficient sound judgment, discrimination and good taste to purchase them when they are produced. Open your history and learn again that the light of education and high culture always precedes any period of abiding economic prosperity in the life of the world. I need not I think, lastly, stop to say here that there are abundant opportunities for the practice of literature and art in this country. We have the finest landscapes you can see anywhere by summer and winter, and our history is already filled with stories of adventure and romance. We have not, I hope forgotten yet *les coureurs des bois*, *les voyageurs*, the long line of discoverers who mapped out this great northland from sea to sea, and that other long line of missionaries, French Catholic missionaries, who founded this Dominion upon the Rock of Ages. They came from two Motherlands and when the hour of trial came they were not found wanting. They loved liberty, but they loved loyalty more. That was their philosophy, and it was a true philosophy. Liberty without loyalty means chaos, and loyalty without liberty means slavery, but loyalty and liberty taken together are the two great pillars in every abiding nation. If I have any final word to offer then, I should say, "Be loyal. Be loyal to your conscience and to your country. Be loyal to your traditions from the past and to your visions for the future. Be loyal to your Colleges and Universities and to one another and all will be well."

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BOOKS

(*Continued from page 9*)

Yatsen in 1925. After a translator's note, an author's preface, an introduction by Karl Haushofer of Munich and "A Word of Criticism" in seven pages by Englebert Krebs of Freiburg, the author, Gustav Amann, gets down to the work of reporting the progress of Nationalism in China. He is not a good reporter; his account is clouded by a prejudice against the policies of the Occidental governments in their relations with China. (*Continued on page 27*)

Early Industries in the Province of Quebec

By

Dorothy A. Heneker

THE study of the industrial development of any nation necessarily entails an intimate penetration into the details of the everyday life of its people. Thus the history of the creation and development of early industries in this Province is primarily a history of the early French settler; of his needs and how he was able to supply them, of his initiative in discovering and exploiting the great natural resources of the new country he had chosen as his home, and of his courage and resource in the face of unforeseen difficulties and dangers.

The ability of the French-Canadian to reap the benefit of the undeveloped wealth at his command was largely determined by the policy of the French government of those days, and from the outset France placed a heavy handicap on her colonists by adopting a system of monopoly and paternalism which retarded and stultified her economic life.

The colonial policy of Europe in the seventeenth century was based upon the fundamental doctrine "that a colony was wholly the property of its Mother Country—that its territory, products and trade were to be developed, exchanged and exploited for the sole benefit of the parent country, regardless of the interests of the colony itself. Colonies were to be fostered and protected only that they might redound to the strength and prosperity of the Mother country, and the King and his ministers were alone to judge of what was, or was not, for their benefit."

This doctrine, with local modifications, France adopted in Canada, with the result that a regime of privilege and protection practically stifled initiative and private enterprise, while a fluctuating governmental policy,—at one moment favouring the creation of an industry, at another suppressing it under the pretext of protection for the mother country,—proved nearly fatal to any constructive and permanent growth.

Nevertheless various local industries came into existence and flourished for a time, a few of the most important eventually succeeding, "but because of government support and not in spite of it."

Then, as now, the real wealth of the country lay in the great natural resources of forests, fisheries, mines and water power; but under French rule, with the exception of the fisheries, these were practically untouched, although numerous attempts were made to exploit both the lumbering trade and the mining industry. The development of water power in the modern sense, was, of course, unknown, and, except where water power was used to turn the wheels of some flour mill, this great industry remained undiscovered until the advent of electricity in a later generation.

The forest was at once the friend and foe of the early settler. Within its shelter flourished the wild life of the country, which provided food for the colonists and fur for the traders who came over from France to make their fortunes; while oak, ash, maple, pine and cedar furnished abundant material for the construction of ships and buildings, besides supplying fuel in unlimited quantities. On the other hand it afforded cover for the dreaded Iroquois, whilst immense labour was required to clear the land of this primeval growth, to prepare the soil for cultivation, and to construct roads of communication between the various settlements.

The history of the fur trade scarcely comes within the scope of this present sketch. It will suffice to say that this industry was by far the most important element in the economic life of the settlement, and for many years remained almost the *raison d'être* of the colony's existence. Nevertheless its pursuit had a detrimental effect on the development of agriculture and local industries, as the youth of the country greatly preferred the free and adventurous life of a *coureur de bois*, to the more sober occupations of clearing the land and cultivating the soil.

With the exception of the fur trade, lumbering appears to antedate all other occupations of the colony, as "in a narrow sense at least", this industry may be said to have begun with the building of the first log cabin. In an interesting and comprehensive article on "The Forest in New France," Mr. A. R. M. Lower has pointed out that "from the beginning the habitant doubtless did not exist who could not use his axe more neatly than his knife and fork", and that thus skilled labour was available for a great trade in lumber "in addition to the purely physical requirements of raw material and easy water transportation." Nevertheless, although the "possibilities of forest exploitation did not escape observation," and efforts were made constantly to preserve the best timber and to minimize the menace from forest fires, the lumber trade in New France never attained to the proportions warranted by the wealth of timber contained in the country, simply because of the lack of good markets within easy access. There were only two possible markets, "France and the French West Indies, and there were obstacles to the development of both." "France was a long way off, and moreover had two other more convenient sources of timber supply, the one her own native forests, still almost sufficient for our needs, the other the forests of the Baltic countries, comparatively close and rendered available by the well worn paths of an old established trade. The French West Indies were also a long way off, and between them and New France lay New England, offering all that New France had to offer and vending it with cheaper freights and greater energy."

Private initiative faltered in the face of these difficulties and Government support was invoked, "and thus the dead hand of paternalism early settled down upon the lumber trade."

Nevertheless despite all these disadvantages the lavish stores of forest wealth could not be ignored, and a lumber trade of modest proportions gradually developed and exports were sent to France, the West Indies and to Ile Royale.

The majority of wood products sent to France consisted of governmental supplies for the royal dockyards, including such items as masts, spars, ship

timbers and natural knees, and it seems questionable as to whether any private trade in lumber was ever carried on with the Mother country. On the other hand the trade with the West Indies and Ile Royale was almost wholly maintained by private enterprise, and ships built by Quebec merchants exported cargoes of lumber, fish and wheat, in exchange for sugar and molasses. French colonial policy favoured this trade, as it had been long thought advisable to endeavour to make the West Indian Islands independent of English colonial supplies by utilizing the resources of Canada and Ile Royale, and it was not unusual for vessels to call at Ile Royale and exchange a cargo of Canadian lumber and wheat for "a cargo of West Indian produce which had been bought with Ile Royale fish."

Merchant vessels were not the only ships to be constructed in Canadian waters. The ship building industry began with the life of the settlement, and as early as 1612, the missionary Fathers, Massé and Biard, brought food supplies to their famine stricken flock by means of a small vessel which they had built and successfully launched "to the admiration of those who had scoffed at this undertaking." In 1628 Champlain commissioned his workmen to construct a vessel for use in his explorations, and from this time onwards both public and private vessels were built in the colony.

Under the energetic leadership of the Intendant Talon in 1665, ambitious plans were undertaken for the construction of ships of 400 to 800 tonnage, and large ship building yards were established near Quebec on the river St. Charles. Talon had visions of a great future for this industry, but succeeding intendants lacked his zeal and energy, and it was not until the arrival of Hocquart that any extensive development took place. During Hocquart's regime the King decided to try to stimulate private enterprise by granting a bonus for the construction of ships in Canada. This was determined according to the size of the vessel, and the experiment appears to have been successful and to have led to a revival of interest in this industry. Hocquart also inaugurated a somewhat ambitious public programme, and, from 1731 onwards, several warships were built at Quebec. The history of this industry, while full of interest, is far too long for any detailed elaboration, and has been merely mentioned to illustrate the use of timber in the colony itself. Lumbering operations were a simple matter in those early days. For many years the colonists were able to supply their needs from the timber which grew upon their own domains, and for a long time "spruce masts for the local shipping were felled practically into the river." But eventually these supplies were exhausted and the settlers were forced upstream, where, after stripping the main river of suitable trees, they turned their attention to the forests on the banks of the tributaries. Apparently the Richelieu was the only one of these to be extensively exploited, and by "1760 oak and pine were being cut as far afield as the south end of Lake Champlain," while the Ottawa appears to have remained untouched.

Speaking of the lumber industry, Mr. Lower has pointed out that "while this industry was not so well differentiated into its two branches, square-timber making and sawn lumber, as later, yet these two branches were quite recognizable." The original saw mills were primitive water or tide-mills, and were established in the colony from a fairly early date. About 1670, the seigniors of the Island of Montreal contracted with a local carpenter named

Sicard, from Longueuil, to construct a saw mill for use in the seigniory. This seems to have been the first built in this vicinity, and the enterprise proved most successful.

M. Joseph-Noël Fauteux in his book on "L'Industrie au Canada sous le Régime Français" gives an interesting account of a contract made by M. de Ramezay to supply the Crown with red and white pine from his reserves on the Richelieu. Before this contract could be put into effect M. de Ramezay died, but, in the face of general disapproval, his widow decided to carry out the undertaking. In 1726 she entered into partnership with Clement de Sabrevois, sieur de Bleury, with a view to exploiting the saw mill belonging to her husband in his seigniory at Chambly. She hoped by this means to be able to fill the order for planks and other sawn timber which was called for by the contract. Unfortunately disaster followed disaster,—the spring floods carried away her saw mill, one of the vessels which she had chartered to carry the timber over to France, was shipwrecked on the way and her eldest son drowned, while the undertaking, far from being profitable, ran into a loss of some 10,000 livres.

Talon appears to have been the first Frenchman to have visualized the possibility of a great future in the development of the mineral resources of this new country, and with his customary zeal and energy he organized surveys to the copper mines on the borders of Lake Superior, and exploited the coal mines in the vicinity of Quebec.

Copper had been discovered near Lake Superior by the Hurons and Iroquois, and the exploitation of this region was later undertaken by one, Denys de la Ronde, who prevailed upon the Crown to send out two expert German miners, in 1737, named Jean Adam Forster and Christopher Henry Forster, to report upon the rich veins which had been discovered. Unfortunately, although a favourable report was returned, the expense involved made the undertaking prohibitive, and these mines remained untouched until a later generation, when they were exploited by interests from the United States.

The coal mine discovered by Talon had to be abandoned, as, while the coal was of excellent quality, the vein ran almost under the Chateau St. Louis, and its working threatened the foundations of the building. Coal, however, was obtained from Cape Breton, where it had been discovered in 1670, and from about 1678 exports of coal were sent over to France. This industry, however, never really flourished, chiefly owing to the lack of capital and skilled labour, and no enterprise on any large scale was contemplated until well on into the nineteenth century.

The history of the lead and iron mines follows the same course. Lead was, apparently, first noticed in the Lake Superior region, by a missionary, about the year 1658. Lead mines were later discovered in other parts of the country, notably in Gaspé and Baie St. Paul, but nothing was done to exploit this industry owing to the small quantities of ore found and to the difficulty of mining this metal.

Iron seems to have been first discovered in Virginia about 1607, but, although it was subsequently found in various parts of Canada, principally at Three Rivers, no definite attempts at exploitation are recorded until the foundation of the famous St. Maurice Forges at Three Rivers in 1733.

On the banks of the St. Maurice river, almost lost amongst the surrounding foliage, stands today a tall gray stone chimney built in the fashion of another age. This is almost all that time has left us of the once famous forges of St. Maurice, where, during one hundred and fifty years, practically all the iron implements used in the colony were manufactured, ranging from the habitant's kettle, to the cannon balls and shells which Montgomery employed in the bombardment of Quebec.

This enterprise originated in the active brain of one François Poulin, sieur de Francheville, a rich Montreal merchant who owned the seigniory of St. Maurice. As early as 1729, Francheville applied to the Intendant Hocquart for permission to construct the forges, blast furnaces and other necessary buildings, and demanded a concession of the two adjacent seigniories together with the exclusive right of mining on these lands for a period of twenty years. Hocquart felt that this scheme for exploiting the iron mines at Three Rivers had come at an opportune time, as it would give considerable impetus to the extensive shipbuilding programme then under way. He accordingly obtained the privileges sought by Francheville, from the King, and in 1733 a company was formed consisting of Francheville, himself, together with Messrs. François-Etienne Cugnet, Ignace Gamelin and Pierre Poulin. This new society took over all the privileges granted to Francheville besides the newly constructed forge and workmen's dwellings, and was known under the name of "Francheville et Cie."

Francheville died in November of the same year, and, deprived of his inspiration and zeal, the company languished and was finally taken over by another company called "Cugnet et Cie", under the direction of one Olivier de Vezin who had been sent out from France to make an expert survey of the works. Vezin practically remodelled the plant and reorganized the work. Kalm gives an interesting description of this plant in 1749. "The iron work," he declares, "which is the only one in this country, lies three miles to the west of Trois Rivières. Here are two great forges, besides two lesser ones to each great one, and under the same roof with them. The smelting ovens stand close to the forges and are the same as ours. The ore is got two French miles and a half from the iron-works, and is carried thither on sledges. It is a kind of moor ore, which lies in the veins, within six inches or a foot from the surface of the ground . . . they cast cannon and mortars here, of different sizes, iron stoves, which are in use all over Canada, kettles, etc., not to mention the iron bars which are made here."

Olivier proved to be an incompetent manager and the company eventually went into bankruptcy, and from then until the conquest the iron works went through a series of vicissitudes until, in 1743, the King ordered the forges to be reunited to the royal domain, and an attempt was made, with some success, to carry on the work for the account and in the name of the Crown. Kalm's comments on the industrial methods employed are most illuminating. "Here are many officers and overseers", he observes, "who have very good houses built on purpose for them. It is argued on all hands that the revenues of the iron-work do not pay the expenses which the King must every year be at in maintaining it. They lay the fault on the bad state of the population and say that the few inhabitants in the country have enough to do with agriculture and that it therefore costs great trouble and large sums to get a

sufficient number of workmen. But however plausible this may appear, yet it is surprising that the King should be a loser in carrying on this work; for the ore is easily broken, is very near the iron-work and very fusible. The iron is good and can be very conveniently dispersed over the country. This is, moreover, the only iron-work in the country, from which everybody must supply himself with iron tools, and what other iron he wants. But the officers and servants belonging to the iron-work appear to be in very affluent circumstances."

No more than a passing reference can be made to the fishing industry, which is a history in itself. With the exception of the fur trade, this was one of the richest assets of the French colony, and large profits were made from the white whale or porpoise fisheries on the lower St. Lawrence, where today the same traps may be seen on the shores as were used in those early times. Nevertheless the fatal system of monopoly and paternalism again applied, and "the Canadian fisheries, like other branches of Canadian industry, remained, for the most part, in a state of almost hopeless langour."

The Crown was exceedingly anxious to develop the fisheries of the colony, and the correspondence of the governor and intendant with the French minister between the years 1680 and 1699 affords interesting sidelights on this subject. "His Majesty", writes the minister in 1688, "wishes you to induce the inhabitants to unite with the merchants for this object, and to incite them by all sorts of means to overcome their natural laziness, since there is no other way of saving them from the misery in which they now are." Denonville points out "that fisheries could be well established to give employment to our young men, and prevent them from running wild in the woods"; and adds mournfully, "they (the fisheries) are enriching Boston at our expense. "This was emphasized by the Intendant Meules in a later letter which complained that "They (the fisheries) are our true mines, but the English of Boston have got possession of those of Acadia, which belong to us; and we ought to prevent it." Nothing was done to prevent it, and so matters went on, the Crown continually supplying funds and even in some cases "boats, harpooners and cordage," and each enterprise ending more or less in failure.

Apart from the natural resources of the country, no serious effort was made to promote local industry until more than half a century after the foundation of Quebec by Champlain in 1608. Nevertheless certain industrial operations existed from an early date which owed their growth and development to the essential need of the colonists for a varied and permanent supply of foodstuffs. Of these the earliest and most important were the industries of Milling, Baking and Brewing.

The Milling industry, later one of the most important in the country, had a humble beginning. In 1606, Marc Lescarbot constructed a small water mill for the use of the little band of colonists which had settled at Port Royal in Acadia under the leadership of Champlain and Poutrincourt. Two years saw the end of this enterprise as the expedition ended in failure, Port Royal was abandoned, and the little group of colonists returned to France.

Twelve years later Champlain, seeking to alleviate the distress of his famine stricken little colony at Quebec, evolved a scheme whereby, by means

of a wooden mortar and pestle, their supply of peas could be ground into a kind of flour. This was, however, a long and laborious process, and Champlain, after watching the workings of a hand mill brought over from France by the Jesuit Fathers, ordered the locksmith of the "Habitation" to construct a mill on this model. This new hand mill proved a success, and enabled the colonists to grind their peas each week, "thus," comments Champlain, "providing a welcome addition to our soup, and doing us a great deal of good."

Not content with this effort, Champlain, during the winter of 1628-1629, set his carpenters to work upon the construction of a mill to be run by water power. This mill, apparently, never came into active operation, as, although all its sections were duly finished and ready to be assembled, the project was abandoned when Quebec was surrendered to the English during the summer of 1629. The construction of a windmill must also have been contemplated, as among the list of effects left in the Fort may be noticed "a hand mill for grinding corn" and "all the iron tools necessary for the construction of a windmill."

Maisonneuve was responsible for the erection of the first mill on the Island of Montreal. This was a windmill known as the "moulin du Fort," as it was built in close proximity to the Fort on the river bank. In common with all mills built at that time, this mill also served the purposes of a redoubt and place of refuge for the inhabitants in case of Indian attack.

During the French regime the milling industry was practically controlled by the owners of the numerous seigniories throughout the country. The exclusive right to build and operate a mill was one of the recognized seigniorial privileges, and each seignior could compel the "habitants" or farmers, within the boundaries of his seigniory, to bring their grain to be ground at the seigniorial mill.

This private monopoly of a public service proved a costly undertaking in a new country where many building materials had to be imported from France, and where the district served was large and sparsely settled. Consequently the seigniors, finding the profits negligible and the losses heavy, often neglected to exercise their right, and the census of 1685 showed a total of only 41 mills for the whole of New France.

This number was quite insufficient for the needs of the growing population, and a long struggle ensued on the part of the French authorities to induce the seigniors to provide sufficient mills and also to ensure that such mills should be efficiently operated.

It is scarcely necessary to add that no constructive development of this industry was possible until this system of monopoly was removed. Eventually more mills were built and flour was even exported from about 1719 onwards, but the primitive installation of many of the mills affected the quality of the flour, and the records reveal a long series of complaints, both from at home and abroad, for which, apparently, no adequate remedy could be found.

There was little need for bakeries in those early days. Each family baked its own bread at home; and the seigniors practically never exercised their right to build and operate a seigniorial oven, recognizing the fact that such a scheme was unpractical and unprofitable in a country where the distances were so great and the climate so rigorous.

Nevertheless as far back as 1620, reference is found as to the existence of a baker who apparently carried on his trade at Quebec in a house in the Lower Town which he shared with the locksmith of the community. Flour at that time must have been brought over from France, as there was practically no cultivation of Canadian soil, or establishment of flour mills until much later on.

As the population increased, however, the inhabitants of the towns gradually grew to depend upon local bakers for their supplies of bread, and by a police regulation of 1676, the Quebec bakers were obliged to keep their shops filled with supplies of both white and brown bread for sale to the public. To prevent competition, and also to ensure the bakers a living wage, tavern keepers of the period were forbidden to bake bread on their premises for sale to their customers, while, on the other hand, bakers had no authority to sell wine or other beverages. The number of bakers in each town, the price of flour and the weight and price of each loaf, were strictly regulated by the Sovereign Council. Until 1686, only three bakers were allowed to exercise their trade in Quebec itself, and this number was rather grudgingly extended to four, upon the earnest solicitation of one, François Fleury, who, finding it difficult to support his family, pleaded for the right to use his trade. After conferring with the town commissioners, the Council decided that Fleury "might be received among the bakers provided that he was well cautioned to keep the rules."

Constant complaints appear as to the inferior quality of the bread sold by the bakers and the high prices charged, while the bakers themselves seem to have suffered from the difficulty of securing their supplies at the prices fixed by the Sovereign Council.

In 1688 the bakers of Montreal alleged that as it was impossible to buy flour at the price of 53 sous fixed by the Council, they were unable to supply their customers with bread of the required weight and quality. Upon investigation this complaint was found reasonable, and the price of flour was raised to 55 sous.

In 1710 a cargo of biscuits and flour was carried from Quebec to Newfoundland by the sailing vessel "Victory." This appears to have inaugurated an export trade with this island and other French colonies which became so profitable that the bakers neglected their local customers. Complaints poured in to the Sovereign Council, and the difficulty was only solved eventually by increasing the number of official bakers in each town.

This industry came temporarily to an end during the years preceding the fall of Quebec and Montreal, as, from 1757, the inhabitants of these towns were strictly rationed and no supplies were available for the local bakeries.

The brewing industry began almost with the life of the colony itself. As early as 1620, the Recollet Father, Denis Jamet, writing to France on the fifteenth of August of that year, declared that "in two years from now we hope to be able to feed a dozen people without help from France, as we should have sufficient grain to supply us with bread and beer."

The earliest brewery seems to have been constructed at Quebec, and was known under the name of "the Brewery of the Habitation." This, however, was destroyed by fire in 1646. Twelve years before the loss of this building the Jesuit Father Lejeune informed the Superior of his Order of his intention

"to construct a brewery to supply the needs of his community," and this project appears to have been carried out about 1646, when it is recorded that the Jesuits erected a brewery at Sillery. An entry in their Journal for that same year shows that "our brother Ambrose" was engaged in the employment of brewing beer during the first three months of March.

The first reference to a brewery in Montreal may be found in the marriage contract between Louis Prudhomme and Roberta Gadois of October 22nd, 1650, whereby thirty acres of land were given the newly wedded pair "near the Fort of Ville Marie, bounded on one side by the lands of the Brewery, and on the other by those of Michel Chauvin." Details are also given in the records of the city archives for June 23rd, 1672, of a general assembly of the principal representatives of Ville Marie called to consider the advisability of building a large brewery to supplant that already in existence, which since the advent of the soldiers had been found inadequate to supply the needs of the growing community. "The money for this apparently municipal venture was borrowed from the Gentlemen of the Seminary, the only bankers of the time."

No great development took place in this industry until the arrival of the Intendant Talon in 1666. Talon saw many practical advantages to be gained from the encouragement of this production, and in 1668 he constructed a large building at Quebec, known as "The King's Brewery," which was capable of producing 4,000 barrels of beer annually, 2,000 of which were for home consumption and 2,000 for exportation to the West Indies. The hops for this brewery were supplied from Talon's seigniory of "Des Islets," and were said to be of an excellent quality and quite equal to those grown on the hopfields of Flanders.

It was hoped that this venture would not only establish a lucrative trade with the West Indies, but would also help to check the infamous traffic in brandy which was ruining the community. By providing the colonists with an economical and healthy beverage, Talon trusted that the sale of spirits would decrease, and his plan was furthered by a regulation of the Sovereign Council which placed heavy limitations upon the importation of wine and brandy.

Unfortunately these hopes were not realized. For a time the colonists drank beer, as wine and spirits were expensive and hard to obtain. But gradually the restrictions on these imports were less faithfully observed, and "beer lost its vogue."

There are few references to brewing after 1725, and apparently the industry slowly declined until, by the end of the French regime, beer was little drunk, and wine, imported from France, seems to have been used almost exclusively throughout the colony.

An examination into the early activities of another group of industries, namely those connected with the production of building materials, such as stone, slate, bricks and tiles, reveals the same lack of any real development under the French regime.

Excellent quarries of lime and freestone were discovered in the districts of Quebec and Montreal within easy reach of the settlements, while constant assertions were made that the soil of this new country was well adapted for

the manufacture of bricks and tiles. Nevertheless, although spasmodic attempts were made to exploit these industries, both by individuals and by the French authorities, little progress was made. The apathetic attitude adopted by the colonists themselves was largely responsible for this failure. In spite of frequent and disastrous fires, they preferred to build their houses of wood rather than use other materials which, while safer, were more difficult to obtain.

In 1727 the Intendant Dupuy ordered all houses in the towns and larger villages to be built of stone, provided this could be conveniently quarried. But, with certain exceptions, this ruling was disregarded and the settlers continued to build their houses of wood.

Although bricks were manufactured in the vicinities of Quebec, Three Rivers and Montreal, this material was little used, and by 1749 it was observed by Kalm, the Swedish traveller, that "the houses in the country districts are built either of wood or stone. No bricks are included in the construction of these houses, as no sufficient quantity of these can be obtained."

In the vicinity of Montreal a certain amount of limestone was quarried on "Ile à la Pierre," an island lying just above St. Helen's Island, and also in the neighbourhood of Lachine and on the slopes of Mount Royal.

Bricks were manufactured at Quebec as early as 1636, and in the autumn of 1673 the records show that a consignment of some 24,000 bricks was shipped by water to Sillery and thence forwarded to Lorette. These were used to build a chapel in the Indian village. The first brickfield in Montreal dates from the 10th of May, 1688, when Marguerite Bourgeois leased a certain property in Cote St. Martin to one Claude Robillard and his associate, Jean Menneville, for a period of nine years. This land was to be used for the manufacture of bricks, tiles and similar materials. It is interesting to read that in 1726 Madame de Ramezay, wife of the governor of Montreal, added the management of a brickfield and a tile-yard to her other activities, and only abandoned these manufactures when her land was requisitioned by the city authorities for the construction of a wall which was to encircle the town.

Slate was imported from France from time to time and was used for the roofs of public buildings and the more important houses in the towns of Quebec and Montreal.

Apparently only two slate quarries were discovered in this Province, one by the Jesuit Fathers in 1667, and one, in 1728, by a workman employed in the seigniory of Michel Sarrazin, the doctor. The former of these quarries was situated some five miles from a lake called the Lake of the Holy Sacrament. The quality of the slate was said to compare favourably with that imported from Ardennes in France, but Talon, to whom the matter was referred, felt that the exploitation would be too costly on account of the distance and the difficulties of transportation.

The second quarry, known as the quarry of the "Grand Etang," proved most disappointing. Both the owner and the French government entertained high hopes that this discovery would ensure an accessible supply of slate for the colony. But unfortunately the slate when quarried was found to be of poor quality and quite unsuitable for building purposes, and after five years

the costly enterprise was abandoned and slate continued to be imported from France.

It is impossible to touch upon all the activities of the early French colonists in the field of industrial endeavour, and many important enterprises have to be omitted, including such industries as tanning and weaving, the manufactures of glue and maple sugar, and the exploitation of the salt mines. In these, as in all others, governmental aid and the spirit of restriction and monopoly proved fatal to any large expansion, and while some progress was made, little real development took place under the French regime.

It is amazing to realize, however, that, in spite of so many difficulties and discouragements, such a variety of enterprises were carried out with, in many cases, a fair measure of success. Apart from the dependence on the Crown, which so hampered the exploitation of private enterprise, the heavy restrictions which prevailed in the colony effectually prevented any free movement of trade and commerce. Merchants not resident in New France were forbidden to sell any goods retail except during the months of August, September and October. They were forbidden to trade in Canada anywhere above Quebec, and also to sell ready-made clothing or domestic articles. Foreign trade was strictly prohibited, and in 1717 the agents of the fur-trading company in power had a right of search for foreign goods in all houses, and such goods, if found, were publicly burned.

It is little wonder that commerce languished and agriculture suffered accordingly. And the fact that so many fields of endeavour were explored and the ground work laid for future profitable exploitation was almost entirely owing to the courage and devotion of those pioneers who devoted their meagre capital to developing the vast resources of their new possessions and refused to admit defeat or discouragement, even under repeated adverses and considerable losses.

* * *

BOOKS

(Continued from page 16)

Western civilization with its crass materialism is the villain of the piece and Chinese Nationalism is the high spirited heroine held captive. She escapes to become a warrior maid and the book concludes with her still in arms. The book has value as a picture of a brief period in the history of the Nationalist movement as viewed by a European whose sympathies are completely with Young China and completely opposed to the existing extraterritorial rights held in China by European powers. The author's worst fears have been confirmed by the course of events in the past year in China. The Nationalist movement has apparently resolved itself into group government sustained by soldiers. In matters of type, illustration, and binding the book is extremely well produced.

* * *

Also received: Nipsya: by Georges Bugnet. Louis Carrier & Co. A novel of the Canadian North West.

Bulletin Twenty-Three
or
American College Athletics in Canada

By R. deL. French

BULLETIN 23* must have caused much pointing with scorn to the faults of their neighbours and equally fervent denial of their own faults on the part of the major universities and the minor colleges in the United States. We know that at least the latter *did* take place, for no sooner had column-and-a-half summaries of the report appeared in the daily papers, promptly following its release to the press, than these were succeeded by three-column denials of the bulletin's allegations from the more severely criticised institutions. Even today, six months after the explosion of the bomb, the pot and the kettle are calling each other black and themselves white, or perhaps just a *little* grey. All of which is instructive and distinctly amusing, when one reflects how difficult it is to secure even the odd inch of publicity for scholastic or scientific news.

Following the Carnegie Foundation's policy, Canadian institutions were included in the investigation. In the words of Dr. Henry S. Pritchett, President of the Foundation, "Speaking a common language, having common traditions, and living side by side, in constant interchange of intellectual conceptions, the educational ideals of the two countries inevitably react the one on the other. It is a fortunate relation for both."

Seven of the one hundred and twelve universities and colleges for which data were gathered are in the Dominion—Dalhousie, Laval, McGill, Ottawa, Queen's, Toronto, and Saskatchewan. Why Acadia, St. Dunstan's, St. François-Xavier, Mount Allison, New Brunswick, Montréal, Western, and Manitoba were omitted, this report saith not. Possibly the investigators felt that a sufficiently representative cross-section of Canadian college athletics could be secured from a consideration of the seven named. It would be interesting, however, to compare conditions at Acadia etc., with those found at the other institutions, particularly as all in that group, with the exception of Montréal and Manitoba, may be classed as "small colleges" in the sense that this term is applied to Amherst, Williams, Wesleyan, Trinity, and others.

Geographical limitations and, perhaps, their comparative youth, may have made the inclusion of the Western Provincial universities impracticable, though neither California nor the colleges across the United States were too far from New York to be visited.

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* "American College Athletics", Howard J. Savage, Harold W. Bentley, John T. McGovern and Dean F. Smiley, M.D., Carnegie Foundation for the Advancement of Teaching, 522 Fifth Avenue, New York, 1929.

Canadians may well feel cheered by the conclusions, as to the stage of our College athletics, set forth in this bulletin, for they are in sharp contrast to the general pessimistic tone of the report. While it is admitted, grudgingly at times it would seem, that the moral tone and general standards of college athletics in the United States have improved during the past twenty-five years, so many examples of lack of sportsmanship, unfair tactics, commercialization, and other reprehensible practices still in existence are brought forward that, one must conclude, the authors regard the athletic millenium in the United States as about as likely to be reached as is complete enforcement of the Eighteenth Amendment.

Sportsmanship is a blend of so many elusive qualities that it is quite impossible to define it exactly. It is made up of fair play, if hard play; honesty, good breeding, in fact of all those intangible and shadowy things which an Englishman includes in the term "cricket." How do we stand in the estimation of the Carnegie Foundation in this respect? Very well, as the following quotation will reveal.

"Canadian amateur organizations of today bear many resemblances to our own, but with this difference, that the tradition of 'the game for the game's sake' and 'playing the game' are far more powerful motives in its preservation than they are south of the boundary." "If athletics in Canadian institutions offer to us who live south of the boundary any principle that is worthy of our most active and sincere admiration and imitation, it is that principle which the Canadian Football Code embodies."

This, of course, refers to the Code's insistence that clean football is not to be secured through the watchfulness of a corps of officials, but that it rests with the players themselves. These quotations are sufficient, I think, to show that what we have always accepted as the only proper attitude of the player toward the game, and what we hope may ever be his attitude, is novel enough in American eyes to call for special comment.

The differences between the attitude of college athletics in the two countries is well illustrated by an incident which occurred during the McGill-'Varsity game in the Molson Stadium last fall. On that occasion I had as a guest an old football player from one of the larger Middle Western universities, to which, incidentally, Bulletin 23 gives a clean bill of health. He had never seen a game of Canadian rugby before, and naturally had many comments to offer on the differences between it and the game he knew. But the one thing he could not understand was the good-natured and friendly feeling between players on opposing sides. Doherty, of McGill, pulled Sinclair, of 'Varsity to his feet after a scrimmage. "Can you beat it? Look at that guy! Coach would never let *us* do that. He said never to lay hands on one of the other side except to 'get' him, and then 'get' him hard, not even to speak to him. Bad psychology!"

But let us pass on to more particular matters. A good part of Bulletin 2 is taken up by discussions of coaching, recruiting and subsidizing, commercialization, and similar matters, with some mention of control of athletics and other subjects of less popular interest, though not less real importance.

While no major compliments are bestowed on the coaching systems of Canadian universities, neither is there any active criticism of them. By

implication, it may fairly be claimed that the systems are thought to be reasonably satisfactory. The coaching of teams by academic instructors is praised. Here it might be noted that the only one of McGill's football teams markedly successful last season was coached entirely by a member of the staff of the Department of Pharmacology.

Our football coaching comes in for some comment. "A beneficent compromise of a policy with the facts of a situation is well illustrated by the cooperation existing at McGill University." And again, "Although at one Canadian University (McGill) the football coach occupies a spectator's seat at contests, a telephone connects him with the players' bench on the side lines." It is difficult to say whether this is a brickbat or a bouquet; presumably it is the latter, for the absence of a coach from the side lines would be unusual enough in the United States to call for special mention. Even the removal of his corporeal presence, though his voice remain, is therefore regarded as a move for the better.

Training tables are regarded as potential opportunities for subsidizing: it is easy to forget bills due by a star athlete, so that the only safe practice is to have all training table accounts collected through the regular university offices.

The Foundation's findings as to the effect of a coach's personality are illuminating: "Younger players usually prefer the coach who, although cursing them to 'raving madness', makes their victory inevitable. With older players such is not the case. Their attitude suggests boredom over the eruptions of their mentor: having heard them many times, the sophisticated regard them as interesting phenomena which are not to be taken too seriously." The reaction of most McGill undergraduates to the cursing coach is pretty generally one of disgust, so far as a rather limited experience qualifies me to judge.

Recruiting and subsidizing are characterized by the bulletin as perhaps the sorest spots on the body of college athletics. "The notion that intercollegiate competition is impossible, or at least impracticable, without subsidies is disproved by the fact that at twenty-eight of the . . . colleges and universities visited . . . no evidence was found that athletes were subsidized. . . ." The twenty-eight, whose names have now been so frequently published as to be almost household words, include every one of the seven Canadian institutions included in the report. Of the other twenty-one, one-half the smaller colleges, with fewer than 1,000 students each. The large universities in the United States whose athletic health was found to be sound are Chicago, Cornell, Emory, Illinois, Marquette, Massachusetts Institute of Technology, Rochester, Tufts, Tulane, the United States Military Academy, Virginia, and Yale. The names which are not on this list are more conspicuous than those which are.

To put this in another way: if the one hundred and twelve institutions visited are really typical, there is no subsidy of college athletes in Canada, while four out of every five American colleges and universities are guilty of paying for their athletic talent, directly or indirectly. This condition may be a cause for heart searching south of the International boundary; for Canadians it only confirms what we have always thought, that Canadian college athletics are pretty clean.

There are no corresponding figures dealing with recruiting, but since that normally goes with the offering of special inducements to athletes, it is probable that the figures would be about the same as those just given. "Canadian university sportsmanship is sufficiently strong to prevent recruiting."

Scouting, or spying on your rivals' plays and men so as to be prepared to meet and overcome them, though perhaps not so reprehensible as recruiting or subsidizing, is surely "not cricket." So expensive has the employment of competent scouts become that before at least one important football game in the United States not many years ago, lists of the plays to be used by the competing teams were exchanged; when the teams took the field the only possible element of suprise lay in the signals. It is hard to see what moral or educational value a contest under such conditions could have. Be it remembered that football is only as good as the acuteness of the player's brain; remove the stimulus to quick thinking in an emergency and the game is gone. "Whether or not the Canadian attitude be due to the influence of English university tradition, at the Dominion universities scouting is considered unsportsmanlike, and the athletic authorities of these institutions have agreed not to make use of it."

The modern tendency to do things in the grand manner is perhaps partly responsible for much of the commercialization of present-day college athletics, but the real reason is more likely the discovery that the public will pay. However, if the public pays, it expects to get its money's worth,—hopes to see its favourites win, or failing that, put up a hard fought battle, or record-breaking performances. It has only thumbs down for a team which, through poor training, lack of incentive, or sheer hard luck, fails to measure up to a spectator's standard, which is not at all the same thing as the standard of the sport.

The wide field of college athletics, many of the most useful branches of which lack public appeal, makes it inevitable that some forms of sport should be supported by income from the more popular ones. Hence, to get the last dollar out of football, for example, it must be run on business lines. But business and sport do not mix any too well, the ancient wheeze concerning deals put through on the golf links to the contrary notwithstanding. For instance, the action of the McGill athletic authorities in raising the price of single football tickets last season met with much criticism, and the criticism became more caustic as the season progressed and it became evident that it was likely to be a "disasterous" one, as indeed it turned out to be from the public's viewpoint. Had the "Big Red Team" won all its games, or a fair proportion of them, we should have heard little or nothing about the prices charged for seats.

It is difficult to reconcile 'the game for the game's sake' with commercial methods; this difficulty has led in more than one instance to the abolition of intercollegiate contest and the substitution of intramural games for them. We need not feel that old man business has our athletics helplessly by the throat, however, if the Foundation's observation be true; "In Canada, university rivalry is no less keen, games are no less enjoyable, and sport is not less well served because its monetary aspects are less magnified." And we may be pleased to hear that "Especially worthy of praise in this particular

are institutions (McGill, Toronto, and others) at which the athletic needs and capabilities of entering students are determined by analysis of individual cases through medical examinations and tactful interviews, and advice is given as to which branches of athletics offer most opportunities for future success."

The careful reader of Bulletin 23 lays down the book with the impression that it strongly advocates complete and real faculty control of athletics, especially commending that in effect at the University of Toronto. Apparently, our system does not impress the investigators enough to be specially noticed, though it is not specifically condemned. Our Department of Physical Education may be partially solaced for its lack of quarters—the long-talked-of, but never realized, "gym.",—and equipment, for "the attention given to the needs and physical condition of students, indicates that much is being made of fair or even mediocre equipment."

Bulletin 23 has been called everything from an immensely valuable document to a piece of rank impertinence. It is really neither, but a good piece of work, which we may hope will lead to some improvement where it is most needed. If it serves only to strengthen the hands of those Canadians, fortunately in the majority, who desire most of all that the traditions of Canadian collegiate sport shall not be debased, it has done well.

* * *

Editor,
The McGill News,
Montreal, P.Q.

Sir:

In the December issue of the *McGill News* is a notice under the heading "Books", of Dr. O'Connor's "Archibald Lampman" in which the reviewer refers to Lampman as a "minor poet" and otherwise deals scornfully with him. "We are not even told that he got respectably drunk."

Your review is of the finest flower of dogmatism and vulgarity. One does not argue with the finest flower of dogmatism and vulgarity. Nothing is to do but also to be dogmatic, which I proceed to be. But unlike your dogmatist I append my name.

Beyond reasonable doubt, Archibald Lampman is the greatest of Canadian poets. His work will live. Some of his sonnets rank with the finest of English literature. I knew him as a brave gentleman himself.

Yours truly,

P. D. ROSS.

The Barren Lands of the Sub-Arctic

By W. H. Moore (Science '27)

THE following is an impression of the country and citizens of the part of Canada known as the "Barren Lands," gained from a little over a year's residence in the sub-Arctic. The author was never in the "Arctic," that is, north of the Arctic Circle, and these remarks do not describe conditions other than as they are found on the west coast of Hudson's Bay. The Eskimo's habits, and the country in which he lives, vary widely in the North, and while it is true that there are characteristics common to all Eskimos, it does not follow that because certain conditions are found in the Eastern Arctic, for instance, these same conditions will necessarily be true of natives in the Western Arctic.

Starting from Churchill on the west coast of Hudson's Bay and running roughly northwest for one thousand miles is a line marking the northern limit of timber growth in central Canada. Stretching northward from this boundary to the Pole are the Barren Lands of the sub-Arctic and Arctic regions. In this great area, there are no trees, and to an observer this absence of timber gives to the land a sufficiently barren appearance to justify its name.

Farther west, towards the Mackenzie River basin, timber grows to the Arctic Circle, and along a number of rivers on the Arctic coast is found within the Circle. The Canadian sub-Arctic is that part of the Northwest Territories south of the Arctic Circle, and within this area the Barren Lands stretch inland from the west coast of Hudson's Bay.

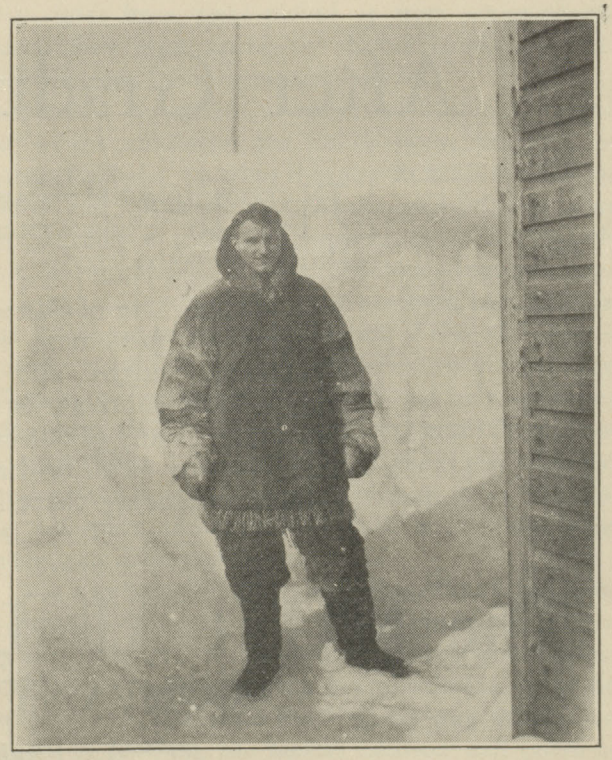
The barrenness of this part of the sub-Arctic is not due to lack of irrigation, as large sections of this area include as much water as land. In some places the country, viewed from the air, presents a vast number of lakes separated by narrow strips of land. The absence of timber seems mainly due to the fact that there is no soil upon which trees can take root and grow. Granite and sandhills are all that one finds on the west coast of the bay from Churchill northward, with little true soil.

Even this unpromising source, however, produces a multitude of flowers in summer. The ground is everywhere covered with moss of several species, and here and there appear patches of tall grass and what looks like wild oats. At Tavane, a small settlement on the shore of Hudson's Bay, about one hundred miles south of Chesterfield Inlet, over one hundred varieties of flowers have been found, and a number of kinds of mushrooms. Butterflies, bees, wasps, flies, and, of course, mosquitoes also thrive in the summer time.

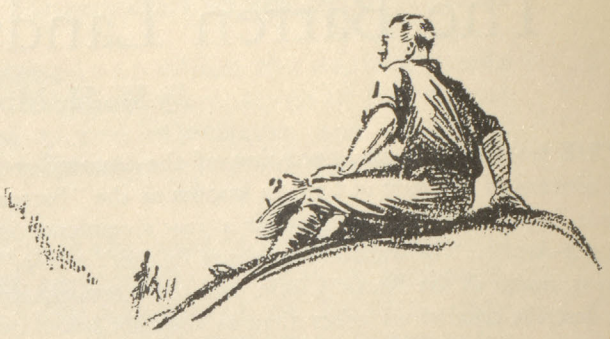
In this district, the country is flat, the hills being only fifty or sixty feet high. Most of the lakes are shallow, and rocks, just below the surface, render landing in an aeroplane hazardous, if the lake is not well known.

These lakes provide fine fresh-water lake trout, and in one large inland lake some fresh-water seal were discovered. During the winter at Tavane fishing was carried on by jigging and by nets through holes in the ice. Innumerable ducks and geese inhabit these lakes in the summer, also ptarmigan, Arctic hares, swans, jægers, turkey cranes, and a variety of small birds. Gophers abound among the sand hills, and it is here and farther north that the white fox finds its home. In this latitude the rabbits, foxes, and ptarmigans scarcely have time to change colour between winters, and some have white patches even in the middle of the short summer.

At the settlement at Baker Lake (lat. 64½°N.), about two hundred miles northwest of Tavarne (lat. 62°N.), some full-sized potatoes were grown under glass by a trading post manager. Lettuce and radish seeds, planted at Tavane, produced small plants which never really matured. The seeds were planted in the ground close to a building in the open and received no particular



W. H. MOORE
The author at Tavane, N.W.T., June 1st, 1929.



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attention. From early in July until early in September, however, the large number of wild flowers which appear in succession, new kinds blossoming when old ones die out, covers the country with colour. Red, yellow, purple, and white are the predominating colours, and green, yellow, and black moss forms a pleasant background, though none of the colours are really brilliant. The flowers are small; none growing very high, while the only tree is the lowly willow bush, which sometimes attains a height of about two feet.

The beginning of June at Tavane found some indications of approaching summer, in the milder weather, with the snow beginning to melt in the daytime. By the beginning of July the snow had practically disappeared, not to return in any quantity until late October. The natives begin to move out of their snowhouses and go into tents about the middle of May. By that time snowhouses become rather uncomfortable. The snow begins to soften and settle; water drips from the roof, and there is danger of actual collapse. So the Eskimos pitch their tents on top of the snow and move in. For the next six months an ordinary canvas tent, purchased from the trading posts, forms their home, until, late in November, they move back into their winter residence, the igloo.

Some native families still live in sealskin tents in the summer, but the majority in this neighbourhood have forsaken homemade tents in favour of the white man's canvas bell-shaped tent. A layer of deerskins and a deerskin sleeping-bag comprise the native's bedding, while for cooking purposes, and also for heating, small "Primus" stoves burning gasoline or coal-oil are universal.

Many of the Eskimos own boats, and sometimes travel several hundred miles along the coast. Large open whaleboats, using a single sail, are the commonest type on the west coast of Hudson's Bay, but some natives own gasoline launches. Most of the families own a canoe, and these, as with all possessions not needed in the winter, are piled somewhere and cached until needed again.

The civilized white man is forcibly struck with the Eskimo's system of caching food and other possessions. The Eskimo has two sets of equipment, one consisting of his tent, boat, and light clothing, used only in the summer time; the other, consisting of his komotik (dog sleigh), deerskin clothing, snow knife, and other things used only in the winter. Instead of carrying all his worldly possessions with him in both seasons, he takes all his summer outfit at the beginning of winter and caches it, and likewise caches his winter outfit at the beginning of summer. Wherever he finds himself at the beginning of the season, he gathers the possessions he does not need until the following season, builds a cairn of them, protected from the elements with tarpaulins and rocks, and leaves his "cache" there, in some spot he will readily recognize, until he wants it again. When the Eskimos make a "kill" of caribou and cannot use it all immediately, they make caches of the meat in the same way, and also, when they are travelling, food caches are often placed along the route, to be drawn from when necessary.

It is significant that these caches are regarded as inviolable, and no one but the owner touches them except in cases of necessity, though they are out in the open with nothing to prevent pillaging. At Tavane, the warehouse containing food supplies and other equipment was never locked; and there was never a case of natives taking anything without obtaining permission. Even when they used the warehouse to store supplies of their own, they would request some of the white people to accompany them whenever they wished to get anything out. It is not often that such honesty is found in civilized communities.

The Eskimos in this district did not seem to have any folk-music or songs of their own, but most of them are musically inclined. It sounds strange to hear familiar airs being sung by little Eskimo girls out in the Barren Lands, but they pick them up readily from the white people and the ever-present gramophones. Nor are they behind the times, for the radio broadcast receiver brings the latest popular music as soon as it appears on Broadway. The natives favour lively tunes and show a preference for jigs. Many of them possess gramophones of their own. Now and then one runs across other musical instruments among them, the accordeon being their most popular choice. The only music I have ever heard them play, aside from tunes picked up from white people, was a chant made up mostly of chords, and more like an Indian war dance than anything else.

There is no system of organized education in this part of the sub-Arctic, but the missions, Anglican and Roman Catholic, do what they can to teach the Eskimo adults and children, though the natives' migratory habits render it a difficult problem. It is unfortunately true that denominational controversies sometimes cause strained relations even in these northern communities, and the object-lesson to the natives of this ill-feeling is scarcely beneficial. Some missionaries concentrate their efforts in giving medical assistance and helping in any other ways, rather than in attempting to teach religious theories. They do a great deal of good; and their example to the natives is probably of more value in teaching the spirit of Christianity than when they insist on teaching debatable dogma.

It is a curious fact that these natives carry out most of their activities by instinct, rather than by any reasoning or complicated mental process. If you ask an Eskimo to explain something, or make a calculation, or to do anything which involves thinking his way through an unfamiliar problem, the mental exertion will prove as exhausting as severe physical labour. I have seen a native with the perspiration pouring off his brow when attempting to sketch a map of some district with which

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he was perfectly familiar. Ask him to bring you to a point in the country which he knows and he will set out across trackless, snow-covered wastes without hesitation or uncertainty. Ask him to draw a rough map of the same locality and, because he is not used to it, the mental effort is thoroughly exhausting.

It is not that the Eskimo is mentally deficient. An occasional one is, as is so in every race, civilized or uncivilized, but in general the Eskimo of the Barren Lands is an intelligent individual. He is alert, and keen to understand things in which he is interested, but is not greatly astonished at the white man's wonders. The radio, automobile, and aeroplane are all taken for granted. When he sees the white man going around the countryside, looking at the rocks and collecting samples of them, the Eskimo shrugs his shoulders and laughs at this evidence of his white friend's craziness, but is willing to help him just the same.

As they have to do their own sewing, the Eskimo women develop some fine needlewomen. Making and mending deerskin clothing, including the short-lived "kumiks", or low boots, which wear out rapidly, is an endless task of the women all winter long. Many of them possess portable sewing machines, with which they become proficient in making clothing from materials obtained from the trading posts, but these machines cannot be used in stitching their fur clothing.

The women are more active than the men in playing outdoor games; and nothing gives them greater enjoyment than a lively game of football, played under highly original rules. Whether it be a mild summer's day, or a mild winter's day, with a temperature of, say, twenty below zero, and a snow or ice playing field, the women will race after a football with apparent disregard for the safety of the babies in deerskin bags on their backs. Games are entered into whole-heartedly, and one of the Eskimos in a game at Tavane broke a solid baseball bat on an indoor baseball, so vigorous was his enthusiastic swing.

Civilized mothers would be astonished at the conditions under which Eskimo children thrive. On fine days in the winter, when there is no wind and the sun is shining brightly, the Eskimo mother strolls about with her naked baby sitting head and shoulders out of the fur bag on her back, sunning itself and enjoying the air, though the temperature may be twenty-five below zero! Of course, the snow houses in which they live for six months of the year give the natives practice in enduring cool weather. The temperature in the igloo cannot be allowed to rise much above freezing, or the roof begins to melt and drip, soaking everything, which it is difficult to dry out again.

The snow used to build houses is different from the light, loosely packed snow found farther south. It is blown by the endless winds into solidly packed drifts, so hard that walking on top of it leaves scarcely a mark.



MRS. KHITCHOOYUYOK

The Eskimo Women enjoy a game of football and do not consider that a baby on the back offers any serious handicap.

A Ford snowmobile was driven all over the snowdrifts at Tavane without any danger of sinking. When an Eskimo builds a house, he takes his snow knife, resembling a thin-bladed bayonet, picks a spot on top of a drift, and sets to work. The hole left where he removes the blocks of snow is used as the bottom of the igloo, and the blocks are built into a spiral which closes in to form a dome. Thus the height from floor to ceiling, within the igloo, is considerably greater than appears from outside, as the floor is sunk below the level of the surrounding snow. About half of this snow, within the igloo, is left at its original level to form a sleeping bench. This snow bench also serves as the table and chairs of the snow house.

A block of ice is sometimes set into the roof to form a window. Where families are living in one spot for lengthy periods, that is, for several weeks or months at a time, their snow houses may contain as many as five or six rooms, each room being a semi-detached igloo, adjoining the next one, with a small opening between as a door. If a party is travelling, however, and only wish to build a house for the night, a single small igloo usually suffices. Such an igloo, containing room enough for two people to curl up in to sleep, can be thrown up by an expert native in less than half an hour; but the bigger houses take several hours to build. The walls are thoroughly chinked when the house is built, that is to say, loose snow is thrown over all the house so that the

(Continued on page 32)

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Notes

On January 2nd, at a Special Convocation in Moyse Hall, the University conferred on the Right Honourable Jan Christian Smuts, former Boer general and more recently Prime Minister of the Union of South Africa and general in the British Army, the honorary degree of LL.D. In Canada General Smuts delivered a series of striking addresses, emphasizing, with all the power at his command, his profound belief that in the British Empire there existed proof that a league of nations could function effectively and that, from the Empire, the League of Nations might well derive inspiration and assurance, provided the Empire remained true to its ideals and, with unswerving loyalty to the Crown, continued in time of peace the brotherhood that bound the Dominions and the Homeland in the time of War. A photograph of General Smuts on his arrival in Montreal is included in this number of the *News*.

Following a meeting of the Board of Trustees of the Graduates' Endowment Fund in December, it was announced that, with the approval of Sir Arthur Currie and the University authorities, plans had been made to employ the revenue from the Fund to bring to McGill each year a noted lecturer in some branch of science, or literature. Letters describing the plan have been mailed to all graduates of the University whose addresses were known and, from replies received, the Trustees of the Fund are encouraged to believe that generous support will assure the plan's success.

Under the auspices of the Montreal Branch of the Graduates Society, a series of six Sunday afternoon lectures was inaugurated in Moyse Hall on January 26th, when Professor Ramsay Traquair lectured on "Old Churches and Church Carving in the Province of Quebec." Other lectures of the series were delivered by Professor T. W. L. MacDermot, Dr. John Beattie, Professor F. E. Lloyd, and Mr. Justice E. Fabre Surveyer, their subjects being respectively, "Montreal Merchants and the Northwest," "Sight and Insight," "The Vegetation of North America," and "James McGill."

The *Illustrated Sporting and Dramatic News*, London, reviewed in December Mr. Christopher Hussey's book, *Tait McKenzie, A Sculptor of Youth*. This volume, with 93 illustrations, published by Country Life, Ltd., London, at 25/- is a biography of R. Tait McKenzie (Arts '89, Med. '92, LL.D. '21), with details of his life and of the work in sculpture which has earned world-wide acclaim. The London *Spectator* also reviewed this book in the issue dated January 25th.

Following his visits earlier in the autumn to McGill graduates in the West, Mr. E. W. Beatty, Chancellor of the University, addressed a luncheon of the Ottawa Valley Branch of the Graduates' Society in November. Meeting at the Chateau Laurier, under the presidency of Dr. George S. MacCarthy (Med. '94), 250 guests heard a speech in which the Chancellor stressed the importance of training men with the definite object of fitting them for the public service of the country. In thanking Mr. Beatty for his speech, Dr. MacCarthy declared that the meeting was probably the most successful and interesting in the whole history of the Ottawa Valley Branch.

At the annual dinner of the McGill Graduates' Society of New York, the following officers were elected: *President*, F. T. H. Bacon; *First Vice-President*, Dr. Frank Miller, *Second Vice-President*, Dr. D. MacPherson; *Secretary*, C. Wilbert Ryan; *Treasurer*, B. A. Klein; *Governors*, Roy Seely, F. M. Becket, Dr. V. C. Bailey, A. G. Dewey, W. MacNaughton, and W. H. Luddington.

The New York Branch of the Graduates' Society reports continued activity. The annual meeting was held on November 8th; the President, Mr. F. T. H. Bacon, gave a dinner to the Executive Committee on November 22nd; and the annual stag dinner took place in the Canadian Club, Hotel Belmont, on January 31st. In addition, the Branch assisted Miss Ellen Ballon, a famous daughter of McGill, when she appeared as a leading pianist in the Metropolitan Opera House, New York, on January 26th. Miss Ballon's present address is 4 Beekman Avenue, Mount Vernon, New York.

Statistics issued by the Registrar's Office in February give the following as the nationality of students at McGill: Canada, 2,361; United States, 294; Newfoundland, 37; Great Britain, 24; British West Indies, 14; Ireland, 4; China, 3; Bermuda, Haiti, Japan, Mexico and South Africa, 2 each; Australia, Cuba, France, Guatemala, Latvia and Peru, 1 each. The total enrollment is 2,753, of whom 1,975 are men and 778 are women.

Interesting experiments in the chemical removal of snow from the streets of New York City have been conducted this winter by Dr. Howard T. Barnes, Professor of Physics at McGill. Dr. Barnes, famous for his study and research in the problems of snow and ice, was also successfull on January 13th in releasing, by use of his chemical composition "snowmelt," the Italian freight ship, *Concordia*, frozen fast in the ice of the St. Lawrence River near the Champlain Graving Dock at Lauzon, P.Q.

Dr. A. L. Th. Moesveld, Assistant Director of the Chemical Laboratories of the state university at Utrecht, Holland, arrived at McGill in January to study the problems of ice engineering under Dr. Howard T. Barnes. Dr. Barnes, whose work in this field has commanded world wide attention, is a contributor to this number of the *News*.

Dr. J. C. Meakins (Med. '04), LL.D. (Edin.), F.R.C.P. (Edin.), Professor of Medicine, Director of the Department, and Director of the University Medical Clinic, McGill University, was on November 20th last elected President of the newly-formed Royal Canadian College of Physicians and Surgeons. McGill graduates elected to the council included Drs. J. G. McDougall (1897), Halifax; A. T. Bazin (1894), Montreal; C. R. Gilmour (1903), Winnipeg; E. L. Pope (1900), Edmonton; A.R. Munroe (1906), Edmonton; and G.C. Hale (1909), London, Ontario.

Dr. Wilder Penfield, head of the Department of Neurological Surgery at McGill, addressed the American Association for Research in Nervous and Mental Diseases in December, his subject being "Structural Basis of Traumatic Epilepsy and Results of Radical Operation; Cicatrisectomy." In many instances, Dr. Penfield stated, surgery in cases of traumatic epilepsy had produced highly successful results.

Dr. H. M. Ami (Arts '82, M.A. '85) returned to Canada in December after prolonged work at Dordogne, France, under the auspices of the Canadian School of Pre-History. Dr. Ami states that strong evidence has been found in the caves and hillsides of Dordogne to support the belief that in France was the prehistoric home of the Canadian Eskimo. The Canadian School of Pre-History operates under the auspices of the Royal Society, of London, England, and in conjunction with the Beaux-Arts de France. Specimens of the School's discoveries, having been released by the Government of France, will be presented to McGill and other Canadian universities.

(*Continued on page 38*)

Personals

The *News* welcomes from graduates press clippings with details of their appointments, promotions, and other activities. Letters with information of this nature should be addressed to H. R. MORGAN, Esq., The Recorder Printing Co., Brockville, Ontario; or to the EXECUTIVE SECRETARY, Graduates' Society, McGill University, Montreal.



G. S. CURRIE
President, The Graduates' Society of McGill University

In a letter to the Graduates' Society, DR. F. S. GREENWOOD (Med. '78), of St. Catharines, Ont., notes that since his graduation five members of his family have graduated in medicine from McGill, including his two sons, DR. F. C. GREENWOOD and DR. ALLAN GREENWOOD (Med. '18), who are in practice with him in St. Catharines. Dr. Greenwood attended McGill because he was told it was "the best medical college in Canada, or America." The medical honours for 1929, printed elsewhere in the *News*, will suggest that this status is being not unsatisfactorily maintained.

DR. F. B. GURD (Arts '04, Med. '06), who for eight months has been studying the use of radium in surgery abroad, will return to Montreal in June.

DR. E. P. MATHEWSON (Sci. '85, LL.D. '22), whose life formed the subject of a biographical sketch in the *Explosives Engineer* last August, is now Professor of Administration in the Mineral Industries at the University of Arizona, and is Chairman of the Arizona Section of the American Institute of Mining and Metallurgical Engineers.

On February 5th, COLONEL E. G. M. CAPE, D.S.O. (Sci. '98) relinquished command of the 2nd Regiment, Canadian Artillery, Montreal, and was succeeded by COLONEL WALTER C. HYDE, D.S.O. (B.Arch. '15). Colonel Hyde served with the 1st Canadian Division in France and later commanded a battery of the 16th Brigade, C.F.A., in North Russia. He is now a partner in Hyde & Miller, General Contractors, Montreal.

R. S. L. WILSON (Sci. '11), formerly a lecturer in Civil Engineering at McGill and more recently a professor at the University of Alberta, has been appointed Dean of the University of Alberta's Faculty of Applied Science, succeeding DR. R. W. BOYLE (Sci. '05, M.Sc. '06, Ph.D. '09) who has joined the staff of the National Research Council.

Members of the Class of Law '85 and others will be pleased by the recent announcement that ACTING CHIEF JUSTICE R. A. E. GREENSHIELDS (Arts '83, Law '85), after a serious illness, is able to resume his duties on the Bench.

On January 25th, the *Municipal News*, of Seattle, Wash., printed an interesting interview with J. H. FEATHERSTON (Sci. '93), mentioning that he had graduated from McGill in a class which included DR. HOWARD T. BARNES and, after experience in hydraulic mining, had moved to Seattle, where he is engaged in wholesale trade, and devotes much time to the valuable work of the Municipal League.

E. S. FAY (Arts '29), a former member of the staff of the *McGill Daily*, is now at Cambridge University and has been appointed editor of the *Cambridge Gownsman*.

The Secretary-General of the League of Nations, Geneva, has announced the appointment, as from February 15th, 1930, of LAURENCE C. TOMBS (Arts '24, M.A. '26) as an international official of the Transit and Communications Section of the League Secretariat.

F. E. LATHE (Arts '04, Sci. '07, M.Sc. '15), who for five years has been technical assistant to the President of the National Research Council, was in January appointed Director of the Division of Research Information in the National Research Laboratories, Ottawa.

In Sherbrooke, P.Q., last November, there was formally opened at the corner of Montreal and William Streets, the "MacKinnon Memorial Building," erected by G. D. MACKINNON (Sci. '97) in memory of his wife, and presented to the Y.W.C.A. In acknowledging the gift, the Sherbrooke *Daily Record* pays tribute to generosity which will prove of real benefit to the young women of the city.

A. J. LIVINSON, M.A. (Arts '11) has been appointed chairman of the Citizenship Committee of the City Improvement League of Montreal.

At the conclusion of 1929, HUGH A. LUMSDEN (Sci. '12) presented his seventh annual report as Engineer and Road Superintendent of Wentworth County, Ontario, and the Hamilton and Wentworth Suburban Area. The report, covering work effected on the roads, with an historical sketch of the roads' development throughout the earlier periods of their existence, is a document of interest far beyond the boundaries of the counties immediately concerned.

In December, just one week after reaching California, where he had proceeded on leave of absence after forty years of uninterrupted service as Inspector of Schools in the Province of Quebec, the REVEREND E. M. TAYLOR (Arts '75, M.A. '82), Secretary of the District of Bedford Branch of the Graduates' Society, suffered bereavement through the death of Mrs. Taylor, who had journeyed with him on his holiday. Members of the Society have joined to express to Mr. Taylor the deep regret with which the news of his bereavement has been received.

Personals

(*Continued from page 30*)

Rev. Sydenham B. Lindsay (Arts '08) has been appointed rector of St. Simon's Church, Montreal.

Rev. Herbert Charters (Arts '01), rector of Sutton, Que., and rural dean of Brome and Shefford, has been appointed an honorary canon of Christ Church Cathedral, Montreal.

After wide experience in colonization work with the Canadian Pacific Railway in Canada and the United States, C. R. Bradford (Agr. '21) has been appointed C.P.R. district superintendent of colonization in Winnipeg.

The Hon. Narcisse Perodeau (Law '76), former Lieutenant-Governor of the Province of Quebec, has been appointed to the Quebec Legislative Council.

Iveson A. Miller, M.Sc. (Arts '13), an assistant actuary of the Sun Life Assurance Co., Montreal, has been appointed resident actuary in London, England.

G. Lorne Wiggs (Sci. '21) has been appointed manager of the Montreal office of the C. A. Dunham Co., Limited.

W. H. Stevens (Arts '79) and Mrs. Stevens, of Lindsay, Ont., recently celebrated the fiftieth anniversary of their marriage. After long service as a teacher and as inspector of schools for the West Victoria and Muskoka districts of Ontario, Mr. Stevens retired in 1923.

Brigadier-General H. F. McDonald (Sci. '07), a director of R. P. Clark & Co., Vancouver, B.C., has been elected president of the British Columbia Bond Dealers' Association.

After seven years with the Royal Securities Corporation, Montreal, Paul H. Addy (Arts '22) is now associated with Hannaford, Birks & Co., Montreal.

Dr. William McClure (Arts '79, Med. '84) is returning to China to become head of the Department of Medicine in Shantung Christian University. He has been taking a course in neurology in London.

Dr. B. A. Brown (Med. '18) has been elected to the Board of Education of Oshawa, Ontario.

F. I. Ker (Sci. '09), of the Hamilton *Spectator*, will be a delegate of the Ontario branch of the Empire Press Union at the Imperial Press Conference in London this year.

Rev. G. Campbell Wadsworth (Arts '23) has accepted an appointment as pastor of St. Andrew's Church, Saint John, N.B.

Lt.-Colonel D. S. Tamplyn, D.S.O. (Vet. '01), Veterinary Officer, Military District No. 3, Kingston, Ont., is attached to the Royal Army Veterinary Corps for a three months' course of instruction.

R. B. Clough (Sci. '17), eastern division traffic engineer of the Bell Telephone Co. of Canada, has been appointed division traffic engineer at Ottawa.

St. C. McEvenue (Sci. '13), has been promoted to superintendent in the Canada Life Assurance Co., Toronto, Ont.

Dr. A. R. Walters (Med. '26), has left Apple Hill, Ont., to practice at Coaticook, Que.

(*Continued on page 33*)

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The Barren Lands of the Sub-Arctic

(*Continued from page 27*)

walls are airtight and there is no danger of draughts. One sometimes wishes there was more ventilation, for soap is practically unused among the natives.

Although they are strong physically, the natives all seemed to be weak constitutionally, and minor ailments, such as coughs and colds, are prevalent at all times of the year. The lack of cleanliness may affect their health. When one considers that washing in a snow house means using melted snow in a nearly, or below, freezing temperature, one can sympathize with their lack of enthusiasm for soap and water. Even white men are not too particular when living in a snow house, though there is a doughty Scot, a district manager for one of the trading companies, who has a reputation for shaving daily, even when living in a snow house. Old snow houses are really ice houses, for, after they have been lived in for a time, constant thawing and freezing transforms the dome of snow into a dome what is mostly ice.

It is interesting to note the difference between salt-water ice and fresh-water ice in the spring break-up period. The salt-water ice, which in the winter forms on Hudson's Bay to a thickness of some six feet at Tavane, gradually melts and breaks up in the spring. It remains strong and solid until it has melted away, and a sheet of it, two inches thick, will support a person walking upon it. The ice of the small fresh-water lakes, on the other hand, is not broken nearly so much, since there is no tidal action, and remains as huge sheets criss-crossed by large cracks. It rots away to a cellular honeycomb structure of long vertical needles of ice, having practically no strength, so that, even while it is yet two feet thick, a man's weight may push through a whole section of the ice on which he is standing. At the beginning of the summer when the fresh-water ice has rotted to this stage, there is a continual tinkling sound, like breaking glass, about the ice floes, as the long needles of ice break off in sections and slip into the water.

The aurora borealis displays are beautiful on fine nights all winter, and it is curious that at Tavane (latitude 62 degrees North), the displays usually appeared to the south. Often a brilliant, scintillating dome of greenish-yellow light completely covered the sky, but it was seldom that the "Northern Lights" appeared only to the north. This faint, greenish-yellow tint was the most common colour of the aurora, but occasionally other colours also appeared.

The minimum temperature at Tavane during the winter of 1928-1929 was about 50° below zero, and the maximum summer temperature was 78°F. Fifty degrees below zero is not extremely cold, and is a temperature often found in places much farther south than Tavane. A distinctive feature of the Barren Lands' winter, how-

ever, was that, in addition to the persistent wind storms, the three months, January, February and March, witnessed but ten days when the temperature was not below zero.

Personals

(*Continued from page 31*)

A. Gordon Dewey, M.A. (Arts '11) is the author of *Canada, the Britannic Question and the British Commonwealth To-Day*, a study of the development of the Dominion Status within the Empire.

On leaving the parish of All Saints', Montreal, to become Rector of the Montreal High School, Rev. Canon James E. Fee, M.A. (Arts '03), was presented with a set of the new *Encyclopædia Britannica* by the members of his congregation.

Dr. W. K. Ross (Med. '83) has been transferred from the superintendency of the Ontario Hospital, Penetanguishene, to that of the Queen Street Hospital, Toronto.

After some time as Foreign Inspector at the head office of the Royal Bank of Canada, Montreal, Graham F. Towers (Arts '19) has been appointed Chief Inspector of that institution.

A. J. R. Parkes (Arts '17) has been elected president of the Life Underwriters' Association of Montreal. He is in the service of the Sun Life Assurance Co.

Dr. Elfric D. Brown (Med. '18) is taking a post-graduate course in Surgery in London, England.

Dan P. Gillmor, K.C. (Arts '11, Law '13), and John A. Murphy, Law '24, have formed a legal partnership in Montreal.

W. Wynne Robinson (Arts '05) has been appointed manager of the Montreal office of the National Trust Co.

Rt. Rev. J. F. Sweeney (Arts '78), Bishop of Toronto, has been re-elected president of the Ontario Lord's Day Alliance.

Rev. Dr. E. H. Gray (Arts '06, Med. '11) has been inducted into the pastorate of the United Church at Greenfield Park, Que.

Sir Ernest Rutherford (LL.D. '07), Director of the Cavendish Laboratory at Cambridge and formerly on the teaching staff of McGill, has been awarded the Faraday Medal of the Institution of Electrical Engineers.

Miss Alice Willard Turner, M.A. (Arts '27), has been awarded the Imperial Order Daughters of the Empire National War Memorial Overseas Scholarship for the Province of Quebec for 1929. Now Fellow in Mathematics at the University of Toronto, where she is proceeding to the degree of Ph.D., Miss Turner is a daughter of Rev. W. D. Turner (Arts '98) and Mrs. Turner, of Montreal.

Dr. Austin D. Irvine (Med. '96) has returned to Montreal from pursuing post-graduate studies in Europe.

L. C. Carroll, Arts '29, president of the National Federation of Canadian University Students, represented that body at the annual congress of the National Students' Federation of America, held at Leland Stanford University, California, in January.

(*Continued on page 41*)

THE YOUNG INVESTOR

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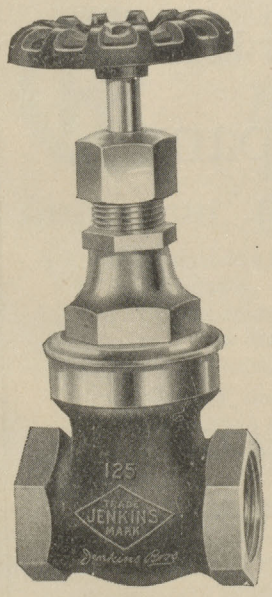


Fig. 300

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Births

AIRD—On January 11th, 1930, in Toronto, to D. M. Aird (past student) and Mrs. Aird, a child.

BARNES—In Montreal, on November 9th, to Dr. William H. Barnes (Sci. '24) and Mrs. Barnes, a son.

BROW—On February 10th, 1930, in Montreal, to Dr. G. Raymond Brow (Med. '20) and Mrs. Brow, a son.

BROWN—On October 11th, 1929, at Pittsburgh, Pa., to Dr. Allyn W. Brown (Med. '24) and Mrs. Brown, a daughter.

CLIFF—In Montreal, on November 16th, to E. Howard Cliff (Arts '16, Law '21) and Mrs. Cliff, a daughter.

COX—At Philadelphia, Pa., on December 2nd, 1929, to John R. Cox (Sci. '10) and Mrs. Cox, a son.

CREASOR—In Montreal, on January 13th, to J. A. Creasor (Sci. '14) and Mrs. Creasor, a son.

ELDER.—In Montreal, in December, to J. Campbell Elder (Sci. '21) and Mrs. Elder, a daughter.

ELLIOTT—In Montreal, on August 10th, 1929, to John Wakefield Elliott and Mrs. Elliott (Mildred R. Younger, Arts '12), a son.

FLEMING—In Windsor, Ont., on December 11th, to Kenneth E. Fleming (Sci. '23) and Mrs. Fleming, a daughter.

FOSTER—In Montreal, on January 30th, to George B. Foster (Law '20) and Mrs. Foster, a daughter.

HALL—At Belleville, Ont., on January 21st, to the Rev. Robert Hall (Arts '22) and Mrs. Hall, a daughter.

HENEY—On January 3rd, in Montreal, to Dr. V. P. Henrey (Med. '20) and Mrs. Heney, a son.

HYAMS—In Montreal, on December 16th, to Dr. Bernard L. Hyams (Dent. '21) and Mrs. Hyams, a daughter.

KNATCHBULL-HUGESSEN—In Montreal, on November 30th, to the Hon. Adrian Knatchbull-Hugessen (Arts '14, Law '14) and Mrs. Knatchbull-Hugessen, a daughter.

MACAULAY—In Montreal, on December 6th, to Dr. Archibald F. Macaulay, Med. '26, and Mrs. Macaulay, of Ottawa, a daughter.

MCOUAT—In Montreal, on December 29th, to T. E. McOuat (Agr. '23) and Mrs. McOuat, a son.

MOORE—In Montreal, on December 29th, to Dr. C. H. P. Moore (Dent. '18) and Mrs. Moore, a daughter.

MURRAY—In Montreal, on January 28th, to C. Ivan Murray (Sci. '13) and Mrs. Murray, of Brockville, Ont., a daughter.

PALMER—On June 14th, 1929, at Trail, B.C., to Dr. J. H. Palmer (Med. '21) and Mrs. Palmer, a daughter.

PARKES—In Montreal, on December 30th, to A. J. R. Parkes (Arts '17) and Mrs. Parkes, a daughter.

PUDDICOMBE—At Hamilton, Ont., on January 24th, to Donald H. Puddicombe (Comm. '27) and Mrs. Puddicombe, a son.

ROBERTSON—In Montreal, on December 27th, to J. Hilary H. Robertson (Arts '15, Law '20) and Mrs. Robertson, a daughter.

ROSS-ROSS—At Cornwall, Ont., on January 31st, to Donald Ross-Ross (Sci. '17) and Mrs. Ross-Ross, a son.

SARGENT—In Montreal, on December 11th, to A. E. Sargent (Sci. '13) and Mrs. Sargent, a son.

SWETNAM—In Montreal, on February 2nd, to Dr. W. S. Swetnam, (Dent. '24) and Mrs. Swetnam, a daughter.

TASCHEREAU—At Noranda, Que., on January 5th, to Rogers H. Taschereau (Sci. '23) and Mrs. Taschereau, a son.

WATERSTON—In Montreal, on February 6th, to E. J. Waterston (Arts '08, Law '11) and Mrs. Waterston, a son.

WATSON—In Montreal, on November 18th, to Dr. E. R. Watson (Med. '22) and Mrs. Watson, a daughter.

WHELEN—On November 2nd, 1929, in Toronto, Ontario, to Morland P. Whelen (Sci. '21) and Mrs. Whelen, a son.

WRIGHT—On October 5th, 1929, at Trail, B.C., to C. H. Wright (Ph.D. '21) and Mrs. Wright, a daughter.

Marriages

BELL—In Westmount, Que., on January 9th, 1930, Miss Ruth Frances Penfold and Dr. Robert Blagrave Bell (Arts '26, Dent. '28).

BERLIND—In Montreal, on December 5th, 1929, Miss Laura Constance Gittleson and Dr. M. Melvyn Berlind (Med. '28).

DAVIES—At Grand Falls, N.B., on December 27th, 1929, Miss Marion White and Thomas R. Davies, M.A. (Arts '26).

HERMAN—At Saskatoon, Sask., on January 11th, 1930, Dr. Morris Herman (Med. '26) of Girvin, Sask., and E. M. Bond.

McTAGGART—On November 23rd, in Montreal, Miss Eileen Lois Ibbotson and George Duncan McTaggart (Sci. '22).

NORRIS—At Perth, Ontario, on January 11th, 1929, Miss Martha Elizabeth Mae Gamble and Kenneth Everette Norris (Arts '29), of Montreal.

PRINGLE—At Three Rivers, Que., on December 18th, 1929, Miss Grace Ione Argall and George Hugh Pringle (Sci. '26), of Chillicothe, Ohio.

ROCHESTER—In Ottawa, on February 8th, 1930, Frances Annable Ross and Lloyd Baillie Rochester (Sci. '21), of Ottawa.

SCHEFFER—In New York City, on November 8th, 1929, Miss Herma Myers and Dr. William Scheffer (Dent. '26), of Montreal.

SMITH—At Fort Covington, N.Y., on December 25th, 1929, Dr. Bruce Taylor Smith (Med. '25) and Elin Karlsson Macartney.

VAN KOUGHNET—At Ridgeway, Ont., on August 24th, 1929, Miss Margery Elizabeth Booth and Edward Matthew Van Koughnet (Sci. '25).

WILSON—In Ladner, B.C., on November 8th, 1929, Miss Gertrude Emma Paterson and Ross Wilson (Comm. '24), of Vancouver, B.C.

WORKMAN—In Montreal, in November, 1929, Miss Anna Helena Friedman and Dr. E. Walter Workman (Med. '26) of New York City.

Ice—A Canadian Problem

(Continued from page 18)

flow of water in the region under consideration; the lines and points of weakness in the ice mass to be considered.

If remedial work is undertaken early in the season so that the accumulation and growth of frazil is kept away from the surface ice and the water allowed to flow under the ice, serious ice jams and the resulting flood and loss of property can be avoided.

In the same way, if engineers in constructing dams and power-houses would take into consideration their ice hazards, and would employ scientific methods for overcoming them, much of their trouble could be avoided and a great deal saved in the cost of construction. It is estimated that many millions of dollars are lost annually from power structures owing to the want of attention to winter operation.

Many lines of work have yet to be attacked, but the great success already achieved by the new methods is very encouraging for the future development of ice-engineering, and from the keen interest with which the public has followed its development, it is apparent that people are beginning to realize that we will not inevitably have to submit to this tyrant of the north, but that it, as well as many of the other great forces of nature, can be controlled and converted to our use and benefit.

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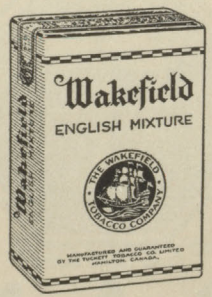
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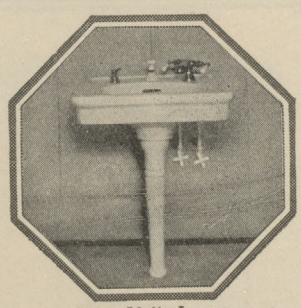
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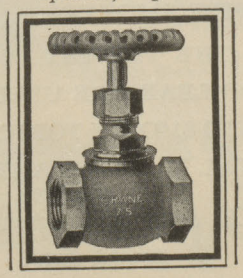
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Memories of Lord Strathcona

(Continued from page 21)

car, bidding us farewell. It might so easily have been his last; but he came twice after that, in 1911, and again in 1913.

In 1911 he came to Canada for a week-end visit, to tender his resignation as Canadian High Commissioner in London to the new Government. The Conservatives had defeated the Liberals and Sir Wilfrid Laurier had given place as Prime Minister to Mr. Borden. Needless to say this visit to Ottawa was a form—strictly correct no doubt, or he would not have come so far to observe it—but there was no question of his resignation being accepted.

During his visit to Canada he called on Sunday afternoon at the College with his daughter, the Hon. Mrs. Howard. He came into the office and stood by the fireplace, but would not sit down, lest he should spend more time than he had to spare. He paid these calls on all his old friends—a great number in an afternoon. Circumstances did not permit of his seeing all the students. But on the following Tuesday many of the women students accepted the men students' invitation, and saw and heard him when he visited the Union, where he made a clear and touching speech. It was a moving sight—age and youth in striking contrast. The student President, Mr. Stuart Ramsay, now Dr. Ramsay, led him to an improvised platform in the Lounge (it was not wise to let him climb the steps to the Hall), and as he spoke the students pressed round, some on chairs and tables, while shoulder to shoulder with them stood Sir William Macdonald, Principal Peterson, the Deans, and other members of Faculties.

That was the last that the students saw of their Chancellor. The Royal Victoria College once more received him, but it was in vacation, and his visit, though made in order that he might take his place and part as Chancellor, was to do honour to the meeting of the American Bar Association, and especially to their guest, the Lord Chancellor of England, Viscount Haldane.

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Mme. Puech Revisits the R.V.C.

(*Continued from page 14*)

clamorous to see her. To those who remembered the days when she inspired her French students, drilled them for their parts in plays, or instructed them how to receive important visitors to the Cercle Français, it seemed that she had lost nothing of her early fire and enthusiasm. Her address to the Alumnæ Society was largely an exposition of her work as the Convener of the Committee of Intellectual Co-operation in the International Federation of University Women, and it revealed the same qualities which had distinguished her when she was French Tutor in the early days of the Royal Victoria College. There was the same sense of enterprise, the same tireless energy, the same taking for granted that anyone belonging to a University group must be equally enterprising, enthusiastic, and energetic.

In her few words to the students of the Royal Victoria College, she struck instantly the note most likely to awaken student ambition, when she told them that some of the best Doctor's theses lately presented at the Sorbonne had been the work of women students formerly Undergraduates of McGill.

An interesting item of news brought by Mme. Puech was that Mlle. Bianquis, who was tutor in French in the Faculty of Arts, and resident at the Royal Victoria College from 1909 to 1912, had been recently appointed Lecturer in German Literature at the University of Dijon. This is a signal honour, as previously only one woman had held such a post in a French university, *i.e.*, Mlle. Villard, who is on the Faculty at Lyons. It should perhaps be noted that there have been other appointments of women in Science, but in the Faculty of Arts, Mlle. Villard stood alone until the appointment of Mlle. Bianquis. It is perhaps not generally known that to secure such an appointment a candidate, no matter how many University degrees he may hold, must qualify by securing the *Doctorat de l'Etat*; this Mlle. Bianquis has recently done.

It should be a matter of pride to McGill Alumnæ that some of their number have received instruction from women as distinguished as Madame Puech and Mlle. Bianquis. To Mme. Puech belongs the special honour that she was the first of the line of outstanding French women who have lived at the Royal Victoria College and promoted the culture of McGill students. No praise can be too high for the far-seeing policy which decreed that a highly qualified French woman should always be numbered among the Resident Staff; and no gratitude too deep for the good fortune which brought us Mademoiselle Milhau as the first of those women.



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Notes

(*Continued from page 29*)

Dr. A. S. Eve, President of the Royal Society of Canada and head of the Department of Physics at McGill, announced in January a series of ten evening lectures on the work of famous British physicists to be delivered by members of the University Staff. It is hoped that, next year, the series will include the work of the scientists of France, Germany, and Scandinavia.

Lecturing at the Mechanics' Institute, Montreal, in January, Dr. A. S. Eve, Director of the Physics Department, explained how the development of aircraft has affected the fighting value of warships and has made the battleship almost useless. In view of the deep interest attaching to the subject through the assembling of the London Conference, Dr. Eve's lecture attracted wide attention and his opinion was accepted as correct by many of the best informed newspapers of the Dominion.

Under the auspices of the Montreal City Improvement League, Professor Ramsay Traquair lectured recently in the McGill Chemistry Building on "Edinburgh," Asst. Prof. F. P. Chambers on "London," and Professor A. W. Dawson on "Chicago." Lieut.-Col. Wilfrid Bovey, Professor P. E. Nobbs, and Professor P. J. Turner assisted the League's work as advisory members of the committee.

In the number dated December 14th, 1929, the London *Spectator* reviews briefly the third volume of *The Reign of Henry the Fifth*, begun by Dr. J. H. Wylie and, following his death in 1914, completed by Professor W. T. Waugh, of McGill. The *Spectator* pays tribute to the manner in which Professor Waugh successfully accomplished a truly formidable task.

The press of Montreal commented enthusiastically on the concerts presented in Moyse Hall this winter by the McGill Conservatorium of Music String Quartet, composed of Messrs. Maurice Ondereet, and Eric Zimmerman (violins), Harry Norris (viola), and Jean Belland ('cello).

Through Marconi Station CFCF, Professor W. T. Waugh, Professor E. R. Adair, and Assistant Professor T. W. L. MacDermot, of the Department of History, delivered recently a series of lectures designed to illustrate those aspects of Canadian history covered by exhibits in the David Ross McCord National Museum at McGill.

To commemorate the 500th anniversary of the triumph of Joan of Arc, Professor W. T. Waugh, head of the Department of History at McGill, presented, this winter in Moyse Hall, a series of three lectures which proved of deep interest, not only to the audiences in Moyse Hall, but to those who read the excellent summaries of them in the daily press.

Under the patronage of a committee which included Sir Arthur and Lady Currie, the McGill University Players' Club presented J. M. Barrie's *Dear Brutus* in Moyse Hall on the nights of November 28th, 29th, and 30th, the cast displaying marked talent and ability.

Through the good offices of the Director of the Department of Extra-Mural Relations, the McGill Players' Club, in December, presented *Dear Brutus* in the ball room of the Chateau Frontenac, Quebec, before an audience of about six hundred guests, whose enthusiasm and hospitality repaid many fold the work of preparing the play for their entertainment.

Following the resignation of Dr. W. W. Chipman, announced last autumn, the Medical Faculty has promoted Dr. John R. Fraser (Med. '10) and Dr. Herbert M. Little (Med. '01) to full professorships in the Department of Obstetrics and Gynæcology.

Notes

(*Continued from page 38*)

Through private generosity, the Royal Victoria and Montreal General Hospitals are now in possession of supplies of radium with an aggregate value of $75,000. Excellent work has been accomplished with the radium, which is proving of great value to the Medical Faculty of McGill.

Among the gifts received recently by the Redpath Library are a series of nine volumes illustrating costume and theatrical design from the National Library in Vienna, presented by Howard Murray, Esq.; a facsimile of the "Codex Argenteus," presented by the University of Upsala, Sweden; and a facsimile edition of the "Codex Manesse," a gift from Miss Alice Redpath.

In January the Law Library of the University announced the acquisition of many interesting volumes, including a number dealing with early legislation and law practice in Canada.

E. W. Beatty, Esq., Chancellor of the University, has presented to each student a copy of the address delivered by the Right Honourable James Ramsay MacDonald, Prime Minister of the United Kingdom of Great Britain and Northern Ireland, on the occasion of his receiving from McGill the honorary degree of LL.D.

The University Club of Montreal, desiring more adequate accommodation, has purchased land on Redpath Avenue, where construction of new quarters is intended.

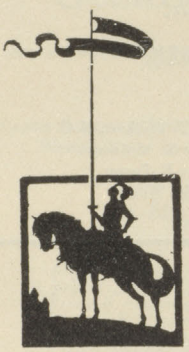
At the annual meeting of the Montreal Board of Trade in January, George C. McDonald (Arts '04) completed his term as President and was succeeded by his classmate, Walter Molson (Arts '04). McGill men elected to the Board's council for 1930 included: H. W. Morgan (Arts '13), S. F. Rutherford (Sci. '96), and P. F. Sise (Sci. '01). McGill members of the Board of Arbitration included: H. M. Jaquays (Sci. '96, M.A. '99, M.Sc. '99) and G. C. McDonald (Arts '04).

In January Professor G. W. Scarth and R. D. Gibbs, of the Department of Botany, presented to the Woodlands Section of the Canadian Pulp and Paper Association a report on "Distribution of Wood, Air, and Water in Trees in Relation to the Sinkage of Logs." As the annual loss from log sinking is enormous, the report represented practical work on a problem of appreciable economic importance.

Some weeks ago the Hon. A. R. McMaster, K.C. (Arts '97, Law '01) presented his first budget as Provincial Treasurer of the Province of Quebec, showing a surplus of $4,011,795. Quebec has now shown a surplus in each of the last 33 years. Mr. McMaster is the second member of the Law Class of 1901 to hold office as Quebec's Provincial Treasurer the appointment having been held previously by the Hon. Walter G. Mitchell, K.C.

An unusual number of graduates in the Faculty of Law will appear in proceedings following the application of the widow and son of the late Sir Mortimer Davis for removal from office of the joint executors and trustees of Sir Mortimer's will. According to announcements in the Montreal press, George H. Montgomery (Law '97), Aimé Geoffrion (Law '93), Peter Bercovitch (Law '00), and G G. Hyde (Arts '05 Law '08), are among the counsel representing the plaintiffs, and on the opposing side are A. R. Holden (Arts '91, Sci. '95, Law '01), Eugene Lafleur (Arts '77, Law '80, LL.D. '21), and G. A. Campbell (Arts '96, Law '01). M. Goldstein (Law '82) and J. A. Engel (Law '12) represent the Federation of Jewish Philanthropies, which is also interested.

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Notes

(Held over from the December issue)

At a meeting of the Corporation in October, the Governors announced that the University had purchased five properties on Pine Avenue and University Street. When the rapid apartment house growth in the neighbourhood is viewed, the wisdom in acquiring property that will one day be essential is manifest.

The Carnegie Foundation recently published the result of a searching three years' enquiry into the subsidization of athletes in universities and colleges of the United States and Canada. Of 130 institutions reported upon, only 28 were found free of the practice, the number including McGill, 'Varsity, Queen's, Dalhousie, Laval, Ottawa, and the University of Saskatchewan.

Under the direction of E. L. Judah, Curator of Museums, Dr. G. R. Lomer, University Librarian, and Prof. L. D'Haultreserve, McGill published in September a fine series of picture post-cards of the University, selling at two for five cents. Of 40,000 printed in the first batch, more than 25,000 have already been sold.

Starting with the current year, the University has arranged a course in Geology leading to a Ph.D. degree.

In October the Registrar of the University announced that, with registration incomplete, 57 candidates for doctorates had enrolled, and approximately 110 for M.A., M.Sc., or M.S.A. degrees. Of the total candidates more than 30 were women.

For the first time, radio is being used by the University this autumn, when four lectures on the McCord Museum will be heard over Marconi Station CFCF. Arrangements for this service were made by the Curator of Museums and the Department of Extra-Mural Relations.

In October the University announced that $1,000 had been willed to the Medical Faculty for the purchase of books by the late Dr. J. A. Lane (Med. '77); and $5,000, for a scholarship, by the late Dr. J. H. B. Allan (Med. '85).

Plans have been drawn for a new Divinity Hall to be erected by the Co-operating Board of the Affiliated Theological Colleges at McGill on the west side of University Street, above the present United Theological College. It is expected that work on the new building will start during the present session. H. L. Fetherstonhaugh (B.Arch. '09) is the architect.

Dr. E. P. Mathewson (Sci. '85, LL.D. '22) is the subject of a biographical sketch in the August number of *The Explosives Engineer*. An authority on metallurgical engineering, Dr. Mathewson is at present Head of the College of Mines and Engineering of the University of Arizona.

W. V. Newson (Sci. '00) is the author of a sonnet, *Beneath Mount Royal*, which was read in Edmonton at a dinner presented by the Northern Alberta Branch of the Graduates' Society on September 27th to the Chancellor of the University and the Dean of the Faculty of Medicine.

As the demand for men trained in Chemical Engineering is acute, the Department of Chemistry at the University is preparing a new course specially applicable to the engineering problems of the chemical industry.

"Interest, Annuities, and Bonds" is the title of a recent book by Herbert Tate, M.A., Professor of Mathematics at the University.

Annual Dinner of the Quebec Branch

On the evening of Saturday, March 1st, the Quebec Branch of the Graduates' Society, under the Chairmanship of the Hon. L. A. Taschereau, Prime Minister of the Province, welcomed Sir Arthur Currie, as guest of honour, to its annual dinner in the Chateau Frontenac.

In presenting Sir Arthur to the gathering, which included many men prominent in the business, political, and social life of Quebec, the Hon. Mr. Taschereau stated that McGill was one of the great assets which the Province of Quebec contributed to the welfare of the Dominion, adding that in the scientific and engineering fields the need for men such as McGill could train was increasing and must be met if the Province were to enjoy the great heritage with which Nature had endowed it.

Replying to the Hon. Mr. Taschereau's speech of welcome, Sir Arthur Currie expressed the opinion that the greatest benefit which college training could bestow was to teach a man to stand alone, and said that at McGill an effort was made to bring to bear on the plastic minds of the students, forces and influences which would help them to stand on their own feet when they left the university and faced life in the world outside.

Continuing, after the spiritual aspect of life as it concerns a university had been mentioned, Sir Arthur dwelt on some practical aspects of work at McGill, more particularly on research in agriculture conducted in recent years at Macdonald College, where an improved oat had been produced with a yield three bushels an acre higher than usual. Three bushels an acre may not seem much, but when one considers the potential increase involved in the crop of, say, the Province of Quebec, the value of the discovery becomes apparent.

Sir Arthur also mentioned that the best fall wheat yet produced in Canada had been developed at Macdonald College, and referred to valuable research accomplished in the livestock field, with particular reference to a study of the parasites of poultry. In fields other than the literal fields of agriculture, Sir Arthur remarked that McGill was fostering and encouraging research, mentioning among those of the University staff whose scientific work had received widespread recognition, Dr. Collip, Dr. Keyes, Dr. Eve, Dr. Barnes, Dr. Shaw, Dr. Reilly, and many more.

Other speakers included Mr. J. Joseph, one of the oldest graduates of McGill, Mr. Alfred Savard, Vice-President of the Quebec Branch, and Mr. G. B. Glassco, Executive Secretary of the Graduates' Society.

Personals

(*Continued from page 33*)

Frederic J. LeMaistre, Sci. '04, has recently been appointed Executive Secretary of the American Institute of Chemical Engineers.

Dr. Gordon C. Kenning, Med. '18, has recently been elected President of the Victoria Medical Society of Victoria, B.C.

Major F. H. H. Mewburn, Arts '13, Med. '14, has been promoted to the command of No. 33 Field Ambulance, Canadian Militia.

Rev. John W. Claxton, M.A., '27, has resigned as assistant pastor of Asbury Methodist Episcopal Church, Watertown, N.Y., to become assistant to Rev. Dr. J. W. G. Ward at the First Congregational Church, Detroit, Mich.

Dr. F. D. Derrick, Dent. '17, of Knowlton, Que., has moved to Moose Jaw, Sask., where his address is 1130 Redland Avenue.

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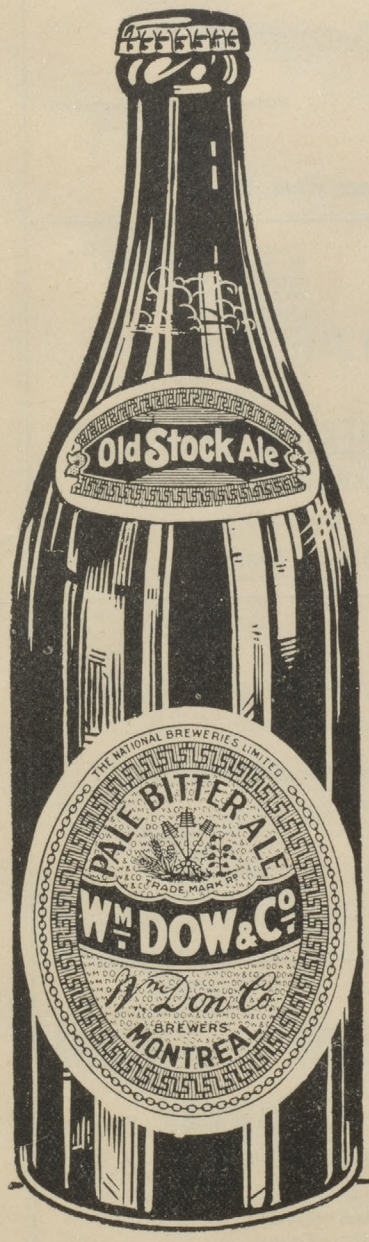
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1879—John Alex. MacArthur, Med. '79.
1884—John McDonald, B.Sc. '84.
1886—Colin Hamilton Livingstone, B.A. '86.
1887—V. F. W. Forneret, B.A., Sc. '87.
1896—Wilbert Mowatt, Med. '96.
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1900—Chas. R. Cook, Med. '00.
Aldred Cookman Paintin, Med. '00.
1903—Samuel Cunard West Morris, Med. '03.
1904—Richard Watson Graham, Med. '04.
1906—Andrew Whitton Hendry, B.A. '06.
Wm. Lewis Mair, Med. '06.
1907—Dr. W. L. Holman, Med. '07.
1909—Delmer A. Craig, Med. '09.
1910—Rev. Percival S. C. Powles, B.A. '10.
1911-'13—J. F. O'Shaughnessy, Med. '11-'13.
1912—Rev. Herbert L. Johnson, B.A. '12.
1913—Wm. Gordon Irving, M.A. '13.
1914—Philip R. Cowan, B.S.A. '14.
Hamilton Cleaver Hughes, B.Sc. '14.
1916—Louden C. Reid, Med. '16.
1917—W. Howard Miller, Med. '17.
1918—E. D. Ingals Brown, Med. '18.
1919—John Archibald Street, Med. '19.
1922—John Duncan Whitebread, Med. '22.
Ivan E. Brousse, Med. '22.
1923—Alphonse Bleau, B.Sc. '23.
Wendell B. Brewer, B.Com. '23.
Kenneth Eldon Fleming, B.Sc. '23.
Chas. Scott Hannen, B.Sc. '23.
Andrew Thos. McIntyre, B.A. '23.
1924—Jas. Cobden Trueman, M.Sc. '24.
Harold C. Alward, Med. '24.
Harry E. Bagley, Med. '24.
J. P. Bethel, B.A. '24.
1925—Thos. P. Cochran, B.Sc. '25.
Robt. H. Duval, B.Sc. '25.
John Douglas Fraser, B.Sc. '25.
John Hamilton Mennie, Ph.D. '25.
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Peter Dudley Dalton, B.Sc. '28.
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Helena Heller, B.A. '29.
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H. R. Montgomery, B.Sc. '29.

The Old and New Roads of McGill

(*Continued from page 12*)

theory, however fascinating, is of any value if the student must immediately forget it when he enters the world of actualities and facts, men who can appreciate the needs of their fellow men and their country and who can play, and are willing to play, an honest man's part in alleviating these needs? The need of such men in any country is always great, and particularly so in our young country with its wonderful resources and potentialities, with its manifold and complex problems and its marvellous possibilities.

The greatest need of our country today is for first-class University professors who are capable of clear, unselfish thinking, honest leadership, good example; who are good teachers and have respect for scholarship and the arts; who hold a proper balance between the material and the ideal, and who have the scientific mind and training without which the fullest possible development of our resources will be greatly retarded. It is our aim and our duty to have a staff of such men.

And now I must stop. I have taken up more of your time than I should have, but there is so much to say. Perhaps you will give me another opportunity.

Let me conclude by giving you the assurance that McGill is devoting her energy and her thought to the bettering of the students committed to her care, to serving the community in which she is situated and to building up the nation of which she forms a part. In this complex world of ours, with its gigantic tasks and life too short for their completion, there is urgent need for the capacity to turn with vigour and effectiveness to any labour, however unexpected, and to any problem, however novel, which the chances of time may present. We are trying at McGill to prepare our young men to meet and to conquer all the chances and changes of time, and to equip them for that role. We want them to leave us as "master adventurers in the field of opportunity." We hope, too, that the University will have an influence on their inner life; that they will acquire the solid satisfaction that comes from a broader vision and a deeper insight; that the University will contribute a heightened joy and an added solace which the treasures of literature and the interests of science afford them during the golden years spent with us. We seek to turn out not only leaders but disciples as well—men who will go to the front in the competitive pursuits of ordinary life, and who will contribute to the welfare and the progress of their own country and of the world.

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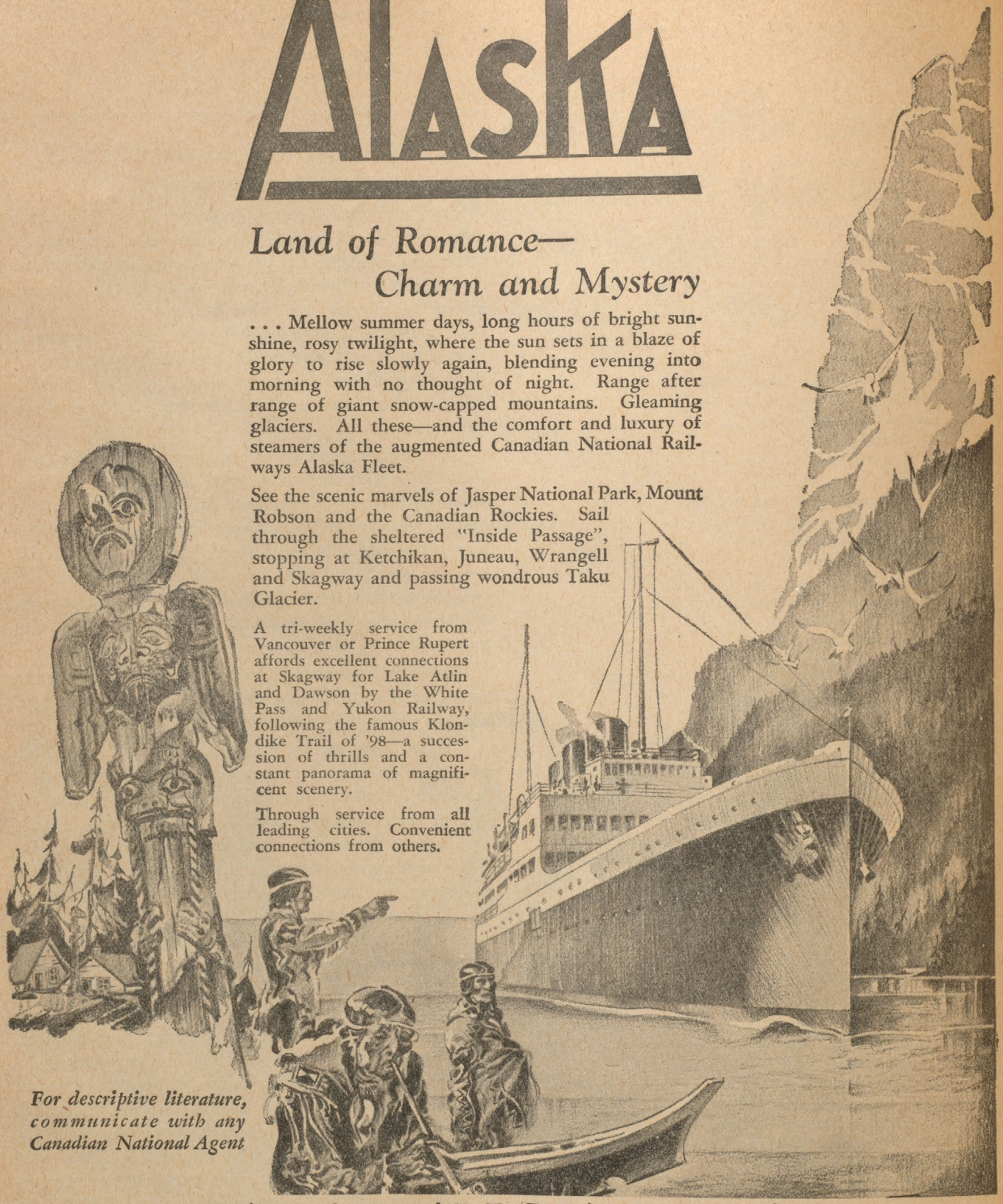
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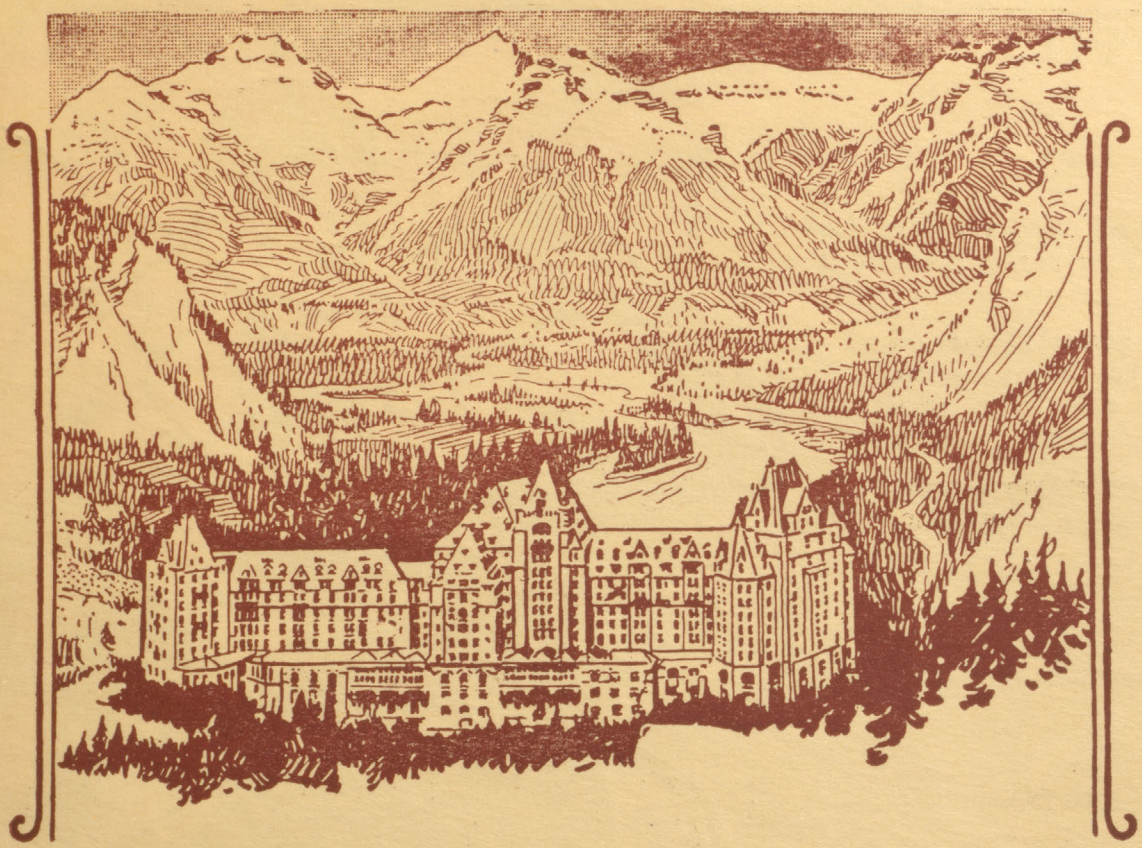


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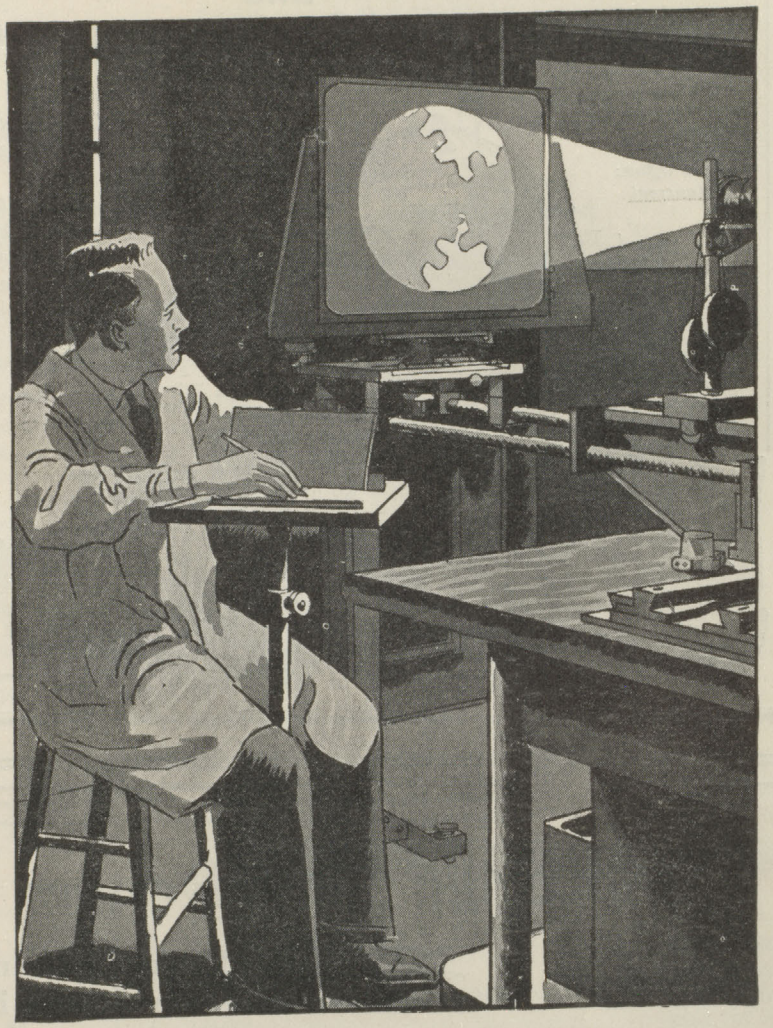
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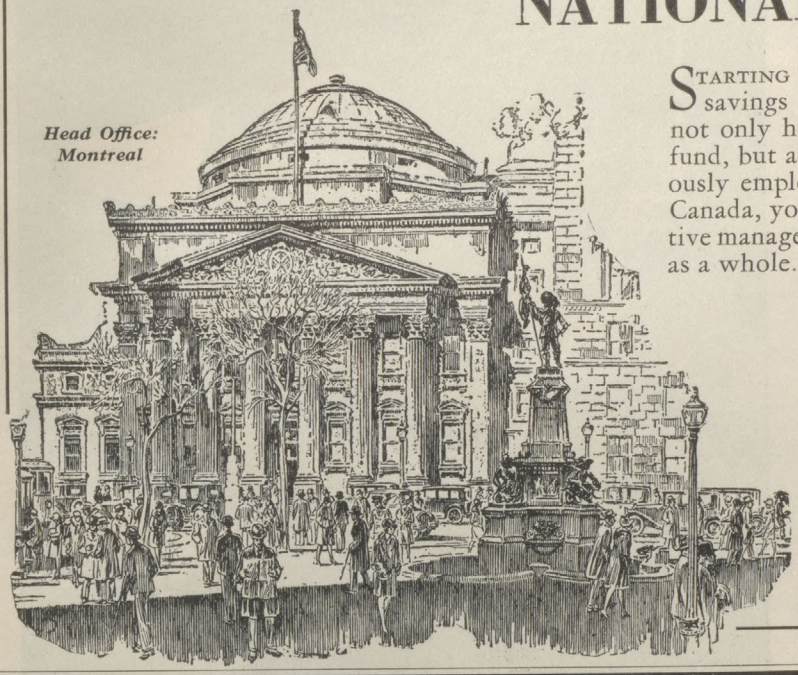
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VOL. XI JUNE, 1930 No. 3

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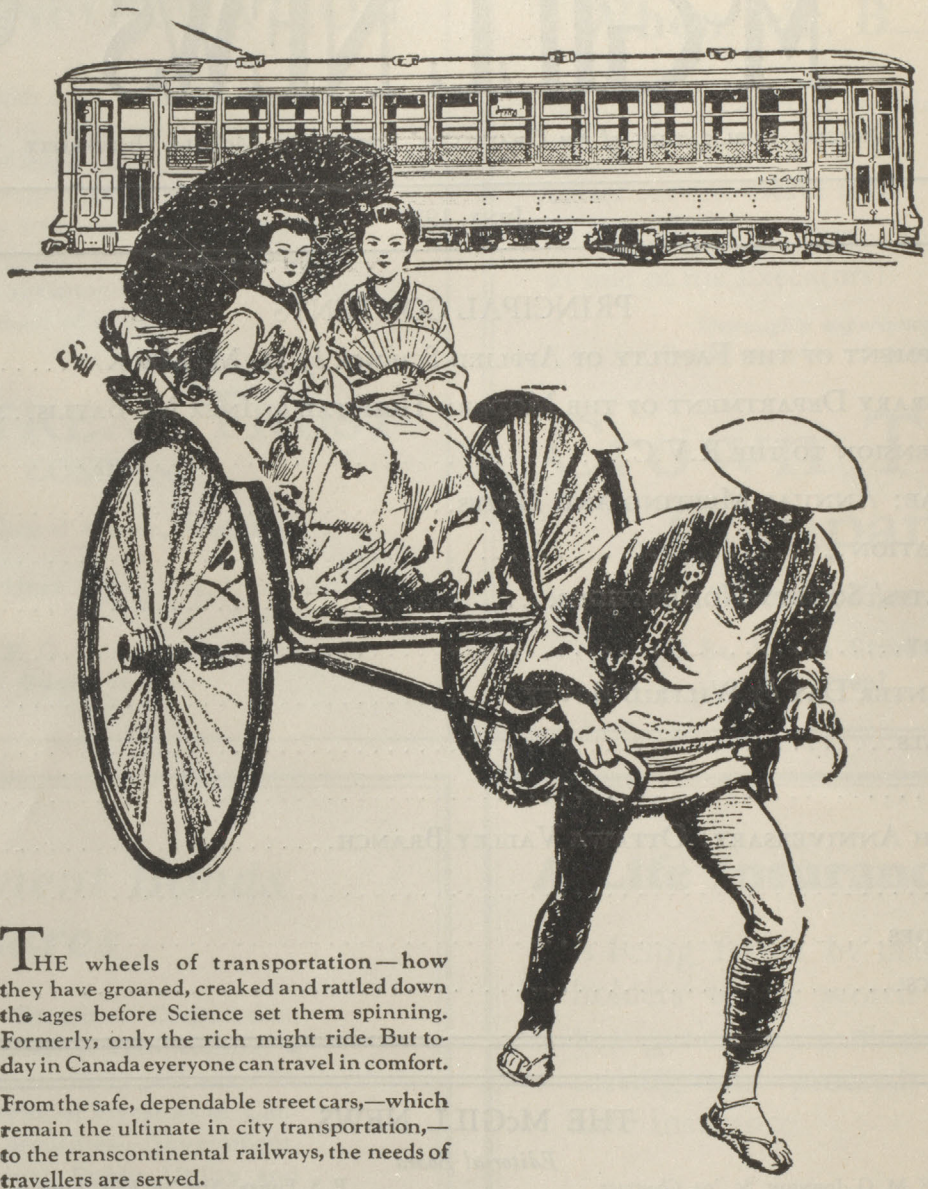
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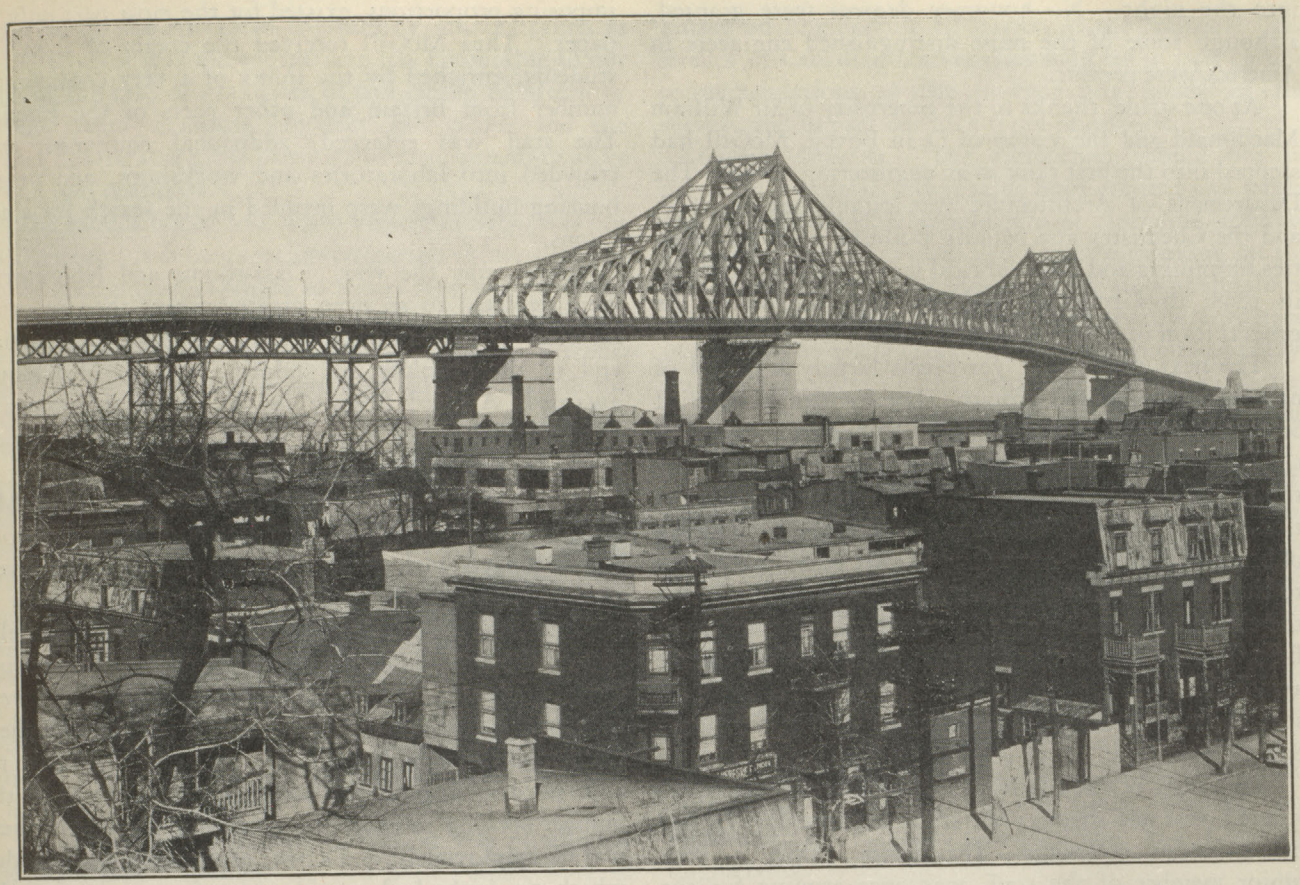
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INFORMATION

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THE MONTREAL HARBOUR BRIDGE

In the construction of this bridge, spanning the St. Lawrence River and formally opened on May 24th, many McGill men were associated, the number including Dean H. M. MacKay, of the Faculty of Applied Science, who served on the Advisory Board of Engineers. The main span of the bridge is 1,937 feet long, and the total length of steel construction is 8,817 feet. The bridge clears the Ship Channel below by 163 feet and includes in its entirety 33,285 tons of steel.

Development of the Faculty of Applied Science

By H. M. MacKay

A DEEPLY charred piece of apple wood lying on my desk recalls some significant days in the history of the Faculty of Applied Science. It was one of the first products of the Thomas Workman shops and originally formed part of the ceremonial mallet used by Lord Stanley of Preston, the Governor-General of the the time, in laying the corner-stone of the first Macdonald Engineering Building, on October 30th, 1890. So far as is now known, its career for many years was uneventful; but in the great fire of 1907 it was a casualty and, indeed, almost a total loss.

The little procession which marched over the rain-soaked ground from the Redpath Museum on that gloomy autumn day forty years ago marked the beginning of the modern history of engineering training at McGill. True, "there were brave kings before Agamemnon". The Hamiltons, Carlyle and Mathewson had already begun their careers as miners and metallurgists. Several others whose professional distinction has not been surpassed by their successors were making their way in other branches. But the success of these men was due more to their native energy and ability, and to the personality of such pioneers as Bovey, Chandler, Harrington and McLeod, than to any curriculum or equipment which would be considered tolerable in a modern engineering school.

The building was ready to receive students in the autumn of 1891. A year later the equipment, on an extraordinarily liberal scale for the time, was practically completed. Early in 1893 the formal opening of the Macdonald Engineering and Physics Buildings took place with functions which lasted nearly all day and far

into the night. No honorary degrees were granted, although some of the most distinguished engineers in America were present.

At one stride, thanks to the generosity of Sir William Macdonald and the vision of Dean Bovey, McGill had stepped into the first rank as an engineering school. The Department of Architecture was established in 1896, and the Chemistry and Mining Building with its facilities for mining and metallurgical work, became available in 1898; thus rounding out the organization in the general form in which we know it now.

The next twenty-five years was largely a period of natural evolution and growth. The Faculty of Applied Science was away to a good start. Other departments of the University required special attention. To some extent the influence of Balliol was felt over the whole institution. The Faculty of Arts was strengthened by a group of brilliant men who came (and in part went) from time to time. Pure science came into its own, culminating for the time in the golden era of Rutherford. The degree of B.Sc. in Arts was instituted, and the B.A.Sc. formerly awarded in Applied Science was abolished. And, of special importance, the foundations of the Graduate School were laid.

The work of the engineers, although, one trusts, respected, was not always understood in those days by our humanitarian colleagues. The writer, then a very junior member of the staff, was once arguing for the inclusion of economics, or history, or some such study in the engineering curriculum, when the entirely charming dean of another faculty expressed surprise that engineers should be interested in anything but "belts and screws." Perhaps this attitude was partly our own fault, for in the early days our new toys, machines and shops with their very practical appearance, received vastly more publicity than the solid scientific work which could not usually be explained to visitors.

In 1907 the fine old engineering building was burnt. Fortunately most of the more costly equipment remained intact. In the new structure which speedily arose on the same foundations, considerably increased accommodation was provided, more especially for drafting rooms. Laboratories were unfortunately but little enlarged, and for many years the cramped quarters were a source of considerable, and sometimes serious, embarrassment. Just as the new building was being completed, Dean Bovey was called to London to be the first Rector of the Imperial College of Science and Technology. He was succeeded as Dean by Dr. F. D. Adams, whose first great step was a thorough remoulding of the curriculum, so as to bring it into harmony with the broader ideas of engineering training which changing conditions suggested.

Canada was then in the midst of the era of railway building, and the number of students, particularly in civil engineering, rose rapidly. The newer universities of the western provinces, which have since grown to such imposing proportions, existed for the most part only on paper. Thus McGill received the cream of Canadian students, enriched by the influx of a very considerable number from Britain and other parts of the Empire. The staff was enlarged, additional equipment was crowded into laboratories and workshops, and neighbouring buildings were invaded in the search for class-rooms.

Then came the war. Class-rooms and laboratories were depleted to an even greater extent than in other faculties. In the number of men enlisted, in casualties, and in the absolute and relative number of honours awarded, Applied Science led all other departments. It is a proud if sad record, in which graduates, undergraduates and past students share alike.

In the two or three years beginning with 1919, McGill, in common with all Canadian engineering schools, was thronged with those who had returned from overseas, as well as with an almost equally large number of students whose entry had been delayed. Unfortunately, just at the time when all the universities were pouring forth graduates in unprecedented numbers, a severe industrial depression occurred, with the result that there were many disappointed hopes and many difficult re-adjustments. Engineering societies were alarmed by the number seeking to enter the profession for whom there was no employment, and a note of warning was sounded which no doubt had considerable effect in turning the minds of many young men to other fields.

Although a somewhat discouraging period, it was not a bad time for taking stock of our methods and objectives. Probably no body of University teachers is so self-critical as engineering instructors. At this time, under the auspices of the Carnegie Foundation and the Society for the Promotion of Engineering Education, an international survey of the training of engineers was undertaken. In this survey McGill gladly took part. Amongst other means of obtaining information a very full questionnaire was sent to all our graduates. Many hundreds of replies were received, all of which were carefully noted and analysed, and it was very interesting to note the close correspondence of the information we secured as regards both opinions and facts, with the results of the inquiries of other leading engineering schools. The survey placed at our disposal not only the opinions of our own graduates, but the experience and consensus of opinion of all the leading institutions on the continent.

One point upon which the survey threw considerable light was the relative financial success of McGill and American graduates. The impression, which had gained wide currency, that Canadian graduates in general, and those of McGill in particular, were being lost to this country in large numbers, because of better opportunities elsewhere, received very little support from the facts presented. The median reported incomes of our men upon graduation were almost exactly the same as those

reported by the American engineering schools taken as a whole. Nor was the comparison less favourable to our men in the case of graduates of five or ten or fifteen or twenty years' standing. In fact the trends and the actual figures as regards earnings were surprisingly alike in the two countries.

The exodus bogey too, when viewed closely, was not so alarming. A subsequent investigation showed that of our Science graduates whose addresses were known, about 11.7 per cent were in the United States. The tendency to emigrate is, however, diminishing, since the percentage of those graduating before 1905 who live across the line is nearly double that of the graduates in the last twenty years. Altogether about 15 per cent of the members of the classes since 1905 are living abroad, a perceptible proportion engaged in graduate work or apprenticeship courses, while about 10 per cent of the whole number of graduates in that period came from countries other than Canada. The net loss of our Applied Science graduates is therefore only about five per cent. It is probable that the distribution as to residence is nearly proportional among the six or seven per cent whose addresses are unknown. Quite possibly universities situated in less active industrial centres may have a larger loss to report.

As regards policy and objectives, it was found that the principles by which we had been guided were in close harmony with the recommendations resulting from the international survey. The following extracts from a report drafted by the writer and approved by the Committee on Engineering Education of the National Conference of Canadian Universities indicate in part certain recommendations of the investigating board of the survey, and in part our own trend of opinion.

General Objective. "The curriculum should not be narrowly technical. As regards both content and methods of instruction it should aim at clear and accurate expression as well as clear and accurate thinking on the part of the student. The interest of the student should be stimulated and the engineering point of view developed in his mind by using every suitable opportunity of applying the principles taught, whatever the subject matter may be, to the problems of the engineer, of the community, and of life. . . . "

Curriculum. "The normal length of the undergraduate curriculum should remain four years. This proposal assumes that no attempt will be made to train men to be either specialists or all-round engineers in that period, and that further training is required to fit them to engage in the more advanced engineering specialties."

"As a general practice undergraduate curricula should be differentiated from each other to a moderate degree only. . . . The primary basis of the differentiation . . . should be restricted to the historic major divisions of the engineering profession, namely: Civil, Mining and Metallurgical, Mechanical, Electrical and Chemical Engineering. . . . "

"There should be a broad band of humanistic subjects extending through the curriculum. . . . It would be desirable to carry formal instruction in English



THE ENGINEERING BUILDING.

through more than one year, but it is deemed even more important to emphasize the necessity for clear and accurate expression in all subjects of the curriculum, and thus to create an atmosphere favourable to the correct use of the language. . . . "

"General economics should be included in all engineering curricula. . . . " "The criteria and technique of engineering economy, as related to costs, economy of design and economy of selection and application should be taught by engineers in connection with engineering subjects."

"It is recommended that elimination of unsuitable students be made as early as possible . . . and that the abler students especially, should be taught to depend upon their own resources to as great an extent as circumstances justify, and increasingly in the senior years."

Space does not permit reference to the recommendation regarding specific studies. One's excuse for dealing at such length with aims and curricula is the keen interest which so many graduates have shown in these matters.

Since the general lines on which we were proceeding seemed to be in accord with the best opinion, important changes in the curriculum have not been numerous. At least as much attention has been given to improved methods of instruction. The post-war generation of students has been much discussed. Perhaps for a time they were not quite so keen as their predecessors. Perhaps, on the other hand, more was demanded of them. At all events a more thorough preparation before entry was deemed indispensable, and accordingly the matriculation standard was raised by about one year. For most of the entrants from the province of Quebec this means one year in the Faculty of Arts; but the best secondary schools in some of the other provinces can meet the requirements quite satisfactorily. Naturally the number of students entering was reduced for the time being, and the effect of this will be felt in the upper classes for two or three years yet. The freshman class this year is about the same in number as before the change in the matriculation standard. In raising the entrance standard there was no thought of increasing the total content of the undergraduate course. It was hoped that the average student would be enabled to do more thorough work, and that the proportion of eliminations for academic reasons would be reduced. Both these hopes are being fairly realized.

Shopwork, at one time considered a very important feature, has been abolished except in a specialized form for mechanical engineering students. It was increasingly realized that student practice in the shops was far inferior to experience under commercial conditions, and that the time and effort required could be used to better advantage in other ways. As a substitute, all students, before proceeding to a degree, are now required to have at least six months experience in engineering or industrial work. Under present conditions students have little difficulty in fulfilling this requirement. A faculty committee gives its aid in making suitable connections. The industries are every year showing greater interest in making contacts with undergraduates, which in about fifty per cent of the cases lead to permanent connections. This vacation work is in part a period of individual adjustment and experiment for both industry and student, while the advantage to the latter of experience in the realities of engineering and industrial life, particularly on the personal and human side, is obvious.

In mining, the former "trip" or school of inspection has been replaced by a season's work in mining or metallurgical plants, under the supervision as occasion requires of a member of the staff.

In electrical engineering the growing importance of electrical communications has led to the organization of a senior option maintained at first with the valued co-operation of the Department of National Defence, but now taken over by the departmental staff.

The Department of Mechanical Engineering has arranged a senior option leading to work in aeronautical engineering. Full training in this branch is so specialized that it must be left to the graduate school.

Beginning next session, it is intended greatly to improve the course in chemical engineering. A new professor will, it is expected, be appointed whose duty it will be to bridge the gap between the engineering and chemical sides. He will doubtless deal with the problems of design and operation relating to the principal unit processes connected with the chemical industry.

A course in the preparation of reports and in public speaking has been established under the supervision of Professors French and Wood. Instruction is largely carried on by means of practice and criticism rather than by formal precept. The appeal of this course has been such that the sophomores to whom it is given have requested a double ration; and upon the request of a large number of the senior class a course in public speaking has been organized for them.

With the co-operation of the St. John Ambulance Association, a course in First Aid has been organized by Professor McBride, who has had much experience in that line of work. Students of the second, third and fourth years are availing themselves in large numbers of the opportunity.

In general, there has been an effort to reduce the number of lectures wherever possible; several descriptive courses have been abolished, the student being encouraged to obtain readily accessible information for himself. There has also been an extension of supervised problem work, with or without explanatory lectures. All this is in reality an effort to replace lectures so far as practicable by tutorial instruction. The engineering library has been greatly augmented and placed in charge of a trained assistant. Rigid attendance rules have been

abolished for upper classes, except where irregularity would lead to disorganization, as in laboratory courses. Interest in work does not seem to have suffered from this step.

If we except the reconstruction of the Engineering Building following the fire of 1907, there had been no notable building additions in the quarter of a century following 1898. And this was hardly an exception, since although drafting room accommodation was greatly increased, other important facilities were but slightly improved and in some cases curtailed. For example, the hydraulics laboratory was virtually squeezed out of existence, although hydro-electric development is by no means an exotic growth in Canada. The splendid Reuleaux collection of mechanical models was not replaced and, an omission which is now keenly felt, no room was provided for the exhibition of engineering models. The inadequacy of office room may be illustrated by the fact that the writer, then about to assume the direction of the Civil Engineering Department, was assigned by the committee in charge to a small attic room without natural light. An unqualified refusal to accept the assignment secured him a room with a window, or to be exact, since his language was devoid of the circumlocution which it now displays, two windows.

Although the successful financial campaign of 1921 placed from five to six million dollars in the hands of the Governors in the next few years, little money was available for the needs of this Faculty. Nearly all was pre-empted to meet obligations of a more general nature, or else ear-marked for specific purposes in other faculties, by the terms on which a large contribution was made. A few crumbs, however, fell to Applied Science.

With the assistance of the Montreal Light, Heat and Power Consolidated, the Shawinigan Water and Power Company, the Bell Telephone Company of Canada, and the Northern Electric Company, a new wing on the site of the old smithy and foundry provided some 60,000 square feet of space on four floors. The ground floor contains an enlarged high voltage laboratory, and a commodious laboratory for internal combustion engines. This latter has been well equipped with units of moderate size, excellently adapted to their purpose. The first and second floors accommodate the heavier equipment of the Electrical Engineering department with room for expansion. The upper floor contains large laboratories for electrical measurements and electrical communications, as well as the departmental offices and library. The whole wing, while economical in construction, is splendidly lighted and well suited to its purpose. A large amount of new equipment has been installed, some by gift, some by purchase and some by indefinite loan.

For eighteen years the hydraulic equipment had been represented by little more than a few tanks and pipes fitted up "temporarily" in a corner of the testing laboratory. Space made available by the erection of the new wing, mentioned above, was utilized to fit up an excellent modern hydraulics laboratory spendidly adapted to instruction purposes and, within limits, to research. Apart from space, the principal limiting condition is that the city water supply only is available. The most is made of this supply through re-circulation by means of a powerful pump. Acting upon the suggestions of the professors of hydraulics, the engineers of the Montreal Island Power Co. incorporated features in their plant at the Back River which will greatly facilitate the installation there of a supplementary laboratory with an ample water supply, when opportunity offers. The hydraulics laboratory was designed by members of the staff and constructed under their personal supervision. The fact that although nearly all the work and equipment was of a very special kind it was completed nicely within their estimates, is a tribute to their engineering skill.

The greatly increased importance of Highway Engineering necessitated the construction of a laboratory equipped with all the apparatus required for making the standard chemical and physical tests of road building materials, bituminous and otherwise. Some of the operations being noisy and dusty, the laboratory is appropriately placed in an out of the way basement where it is seldom seen by visitors. This laboratory, too, was completed within the estimates of the professor in charge.

A new high pressure boiler has been installed to supply the steam laboratory which greatly extends the scope of the work which can be carried out.

Space will not permit of dealing with all the reconditioning and improvement carried out. But while much remains to be done, it is within the mark to say that the recent improvements while involving a comparatively small expenditure, have resulted in a marked strengthening of the teaching work, and constitute by far the most important advance in the material resources of the Faculty in the last thirty years.

At the present time there is every reason to hope that before the year is out work may be started on a new building to house the departments of Mining, Metallurgy and Geology, all of which, and particularly the last named, have been heavily handicapped by insufficient room.

A notable development of the last few years is the rapidly widening field of opportunity for engineering graduates. Probably a minority of those now graduating will follow what used to be understood as professional engineering. On the other hand, most of the leading industries are now seeking to build up their organizations with young men who have had an engineering training. Probably many of the richest prizes as regards

both reward and opportunity for service, lie in the industrial field, in which the demand is far greater than the supply. Character, personality and at least reasonable ability, developed by a sound and sensible scientific training, rather than special knowledge, are the qualifications sought after as regards the rank and file. On the other hand, the rapid development of science and its application to engineering practice requires a number of men of exceptional ability and more highly specialized training. To meet this demand satisfactorily, it is necessary to strengthen our graduate work.

In graduate work considerable progress has been made. Every year new courses are being added or old ones strengthened. There are, however, two serious obstacles in the way of development—limitations of staff and lack of scholarships. All graduate instruction is carried on voluntarily by men already heavily loaded with other duties. The leading American engineering schools have numerous scholarships for which Canadian graduates are welcome applicants. We have but one—founded a year ago by a well known graduate, Dr. Walter Colpitts, Sc. '99,—which is open to graduates of other universities.

The future prestige of the Faculty of Applied Science is, in the writer's opinion, bound up with the development of graduate work. In order that this development may proceed at a reasonable rate we urgently need, not one or two, but several professors who can devote the whole, or the greater part of their time to advanced work and to research; and a system of scholarships which will make it possible for the ablest young men in Canada to take advantage of our resources.

The Library Department of the Modern Hospital

A Study of Voluntary Administration

By INEZ M. BAYLIS

TO the ill-informed a hospital was, and is, a place in which to die; to the better educated it is a place where the body can be mended, for which purpose all kinds of wonderful instruments have been provided. A great amount of money is always spent in hospitals on magnificent kitchens for feeding the body; and in a modern, up-to-date hospital a central, well-kept room supplies food for the mind—this is the library.

Books in a hospital library must be considered from two points of view—their literary, and their therapeutic, value. Many persons who have never before had time to read are given this opportunity in hospital. As one old man said, it had been the dream of his life to read 'David Copperfield', and this dream came true in the hospital. "From now I shall always think of a hospital as a place of joy."

Similarly, a public patient, meeting one of the volunteer librarians, said: "I want to tell you how much this library and your visits have done for me. I had never read much, or cared for books, and I cannot thank you enough for bringing this pleasure into my life. I find books a necessity now, and I am glad to tell you what the hospital library has done for me."

Doctors say that psychology is used more than medicine in the curing of patients. If a sick person's mind is taken away from himself and made happy, his recovery must certainly be faster. Books have this therapeutic value. Books, however, are medicine and must not be given in a careless way to patients. The librarian must not only know the books, but must also have details of the patient's condition. This applies to all patients, but particularly to the neurological. A harmless book given to the wrong person may cause a crisis. A young woman, a mental patient, for example, was given L. M. Montgomery's "Blue Castle", and within five minutes was suffering with hysteria. After hearing details of the patient's condition from both nurse and doctor, I spent over an hour exchanging that book for "Ivanhoe." Love was the cause of the trouble with the first book; and the other was accepted as the patient was Scotch. Another day, "Eliza for Common" was returned by a mental case with every page torn. She said she had enjoyed the book, but her guardian angel had told her to destroy it.

These incidents explain why co-operation between doctors, nurses, and hospital librarians is necessary. Details of these special cases must be given by nurses to librarians; and doctors often prescribe books for the patients—or perhaps it is more accurate to say, prohibit certain types of books for special cases.

In a hospital of any size there are patients of all nationalities and to these the librarian must be able to give books. I shall never forget the expression on the face of a Greek—for he could not express his thanks in English—when a book in his own language was loaned to him. A few days later, Polish books brought great



THE R.V.C. ALUMNÆ LIBRARY IN THE ROYAL VICTORIA HOSPITAL, MONTREAL.
The illustration shows the library of approximately 4,000 volumes, the wagon for conveying books to the hospital wards, and the Convener of the Library Committee, Miss I. M. Baylis, who has now served in this capacity for ten consecutive years.

joy to a young boy who on his arrival from Poland had not found things satisfactory and had attempted to commit suicide. The policeman beside his bed expressed thanks, but the changed look on the patient's face was more expressive.

There are people who have passed through experiences of life to whom the wrong book will cause harm—for example, Philip Gibbs's "Middle of the Road" when loaned to a patient who had passed through the Russian revolution caused great upheaval, and many hours had to be spent by the librarian in inducing the patient to return the book and accept another. When discussing this case, the doctor said that a book causing such disturbance to a patient's mind might often give information to the physician that he could not otherwise obtain.

All these facts prove that a hospital librarian must know the books she is giving out and make a careful study of patients from all points of view, in order that the right book is given to the right person at the right time. As an aid to this ideal co-operation, I have given a lecture on bibliotherapy to nurses, and, as librarian, have attended a course of lectures given nurses this year on psychiatry.

And this is the voluntary work of the Library Committee of McGill Alumnæ Society, carried on for the past thirteen years!

Early in March, 1917, when wounded soldiers were beginning to return to Montreal, it was decided by the Society to finance, and the committee to organize and conduct, a library in every military hospital in Montreal. This work began in the Prince of Wales Hospital with a few hundred books donated, and seven travelling libraries loaned, by McGill University. Before the end of the year, many hundreds of books bought with money raised by the Society were on the shelves. In the five and a half years this library existed, a voluntary worker was present each day to give books to soldier-patients, and another worker to take books to patients confined to bed.

This modest initial effort was only one unit of nine libraries later established and conducted. A library of 600 books was in the Military Hospital in the Grey Nunnery. A bi-weekly visit was made to the military wards of the Montreal General and Royal Victoria Hospitals, where there was an average of 450 books for the soldiers. When four small branch hospitals were opened for soldiers severely wounded in France, and for whom there was little hope of recovery, small libraries were established by us. The tubercular soldier-patients in two sanitariums in Ste. Agathe were not neglected. Books, many of them vocational literature that would aid in securing livelihood for patients—wood-carving, poul-

try and bee raising, etc.—and seven magazines subscribed for were sent to each sanitarium.

The veterans of the district of Montreal are all now cared for in one hospital at Ste. Anne de Bellevue. Here, since January, 1919, the McGill Alumnæ Society have financed and conducted a library. This year there are on the shelves 5,764 books, all of which are owned by the Society. The room in which these many wonderful books are contained is a true library—a bright, artistically furnished room in the centre of the building, with a large table, where the last numbers of the eleven magazines to which we subscribe are placed in folders, and writing tables, furnished with paper and envelopes, supplied by the committee. A librarian is in attendance daily to help the men choose their books, and to take books to those unable to walk to the library.

Strange bits of conversation are heard by the librarian as the men sit round the room and discuss the books. A soldier-patient returned one of Dickens' novels with great scorn, saying that in one of his stories he made the moon rise out of season. Another book was classified as a beautiful story because "she falls into the arms of her husband at the end." Two men who had finished reading the life of Queen Victoria recalled memories of her death, one saying he had at that time sold 55,000 yards of black material for mourning in one day, the other telling how beautifully his sister sang in a public house. This gives some idea of the different types and callings of the soldier-patients.

Of the 445 patients in this hospital many are extreme mental cases, and two wards are given to the tubercular patients. For this reason the circulation in the past year was only 6,635, whereas at one time the average number of books given out each day was 110. To the tubercular patients we have always supplied books which were kept in their wards, but this year a room, furnished as the main library, is being given us for our 1,100 books for these patients exclusively.

The money to buy all these books and magazines has been and is now being given by the McGill Alumnæ Society to the Library Committee.

Strenuous efforts have been made by the Library Committee and by the staff of the hospital to secure a grant from the Government. But even though this has met with no success, help has come to us from the Govment in other ways. Ever since the library was opened in this hospital, the Government has paid the salary of our librarian, for here we had to abandon our ideal of volunteer librarians, the two hours' ride on the train, apart from the expenses, was more than could be asked daily of anyone. We have been most fortunate in having in this position the same person all these years, one who takes the work not as drudgery, but as joy—Miss Clare Harrington. The Convenor is kept in touch with this library through weekly letters, Miss Harrington's monthly visits to the Committee, and visits of members of the Committee to Ste. Anne's.

The two illustrations accompanying this article are of the second library now under the management of the Library Committee of the McGill Alumnæ Society, in the Royal Victoria Hospital, Montreal.

In 1920, when the Prince of Wales Military Hospital was closing, the Committee decided that a large, well-catalogued library in good condition should not be divided. We had realized, when giving books to the soldier-patients in civilian hospitals, the need of a library in every hospital, and the offer of this library was made to the Montreal General and Royal Victoria Hospitals, with two stipulations, that a large central room be given the library and that the same amount be spent annually on books that it had cost the McGill Alumnæ Society to keep the library up to our high standard. Officials of both hospitals were ready to do anything in their power to receive the gift, the room being the thing that decided the Committee to make the donation to the Royal Victoria Hospital. An offer was made at the same time that we would carry on the work for two months to show how it had been done and to give the authorities time to engage a librarian, thinking they would only want a person receiving a salary on their staff. But we are now in the tenth year, and are urged and expect to continue, without any end in sight. I can truly say from sincere remarks made by other members of the staff and from all that is done to aid us, that our work is appreciated. In fact, when telling of the privileges and co-operation we receive to paid hospital librarians at a convention, I was called upon to stop, one delegate remarking that she was becoming so jealous she was almost ready to resign her paid position and come up to Canada to be one of our volunteer hospital librarians.

In the illustration of the library may be seen 3,498 books on the shelves—that is minus the large number in circulation. In the first cupboard are books for children which have been examined by authorities on such books, and are enjoyed by the young patients, a boy of a wealthy family telling his parents the other day that they need bring him no more books, as the hospital librarian gave him better books then he ever received at home.

In the next four cupboards are fiction, new copies of the ever-popular books being added continually, as well as the latest good novels. The other day when a patient was signing the card for "Good Companions," the doctor in the room made a comment on the good standard of that book and mentioned another one, "All our Yesterdays," which had only been published in the previous week, so, of course, was not on our shelves. When told that the book had already been borrowed by two persons from the hospital library, he could make no further comment.

Non-fiction of all types fill two more cases, and the large case on the right contains books in thirteen languages.

The waggon shown in both illustrations is used to take books of all classes to some part of the hospital every day, the 650 beds being visited twice a week on regular days by volunteer workers. On two days, not only is this waggon taking books from the main library, but a similar one takes books from the branch library of the Women's Pavilion.

$300.00 is given by the Royal Victoria Hospital for us to spend on books annually. But the 661 books added to the shelves in the past year could not have been bought with this amount. A $50.00 grant from the McGill Alumnæ Society, donations from patients and friends, and $20.97 fine money made up the required total.

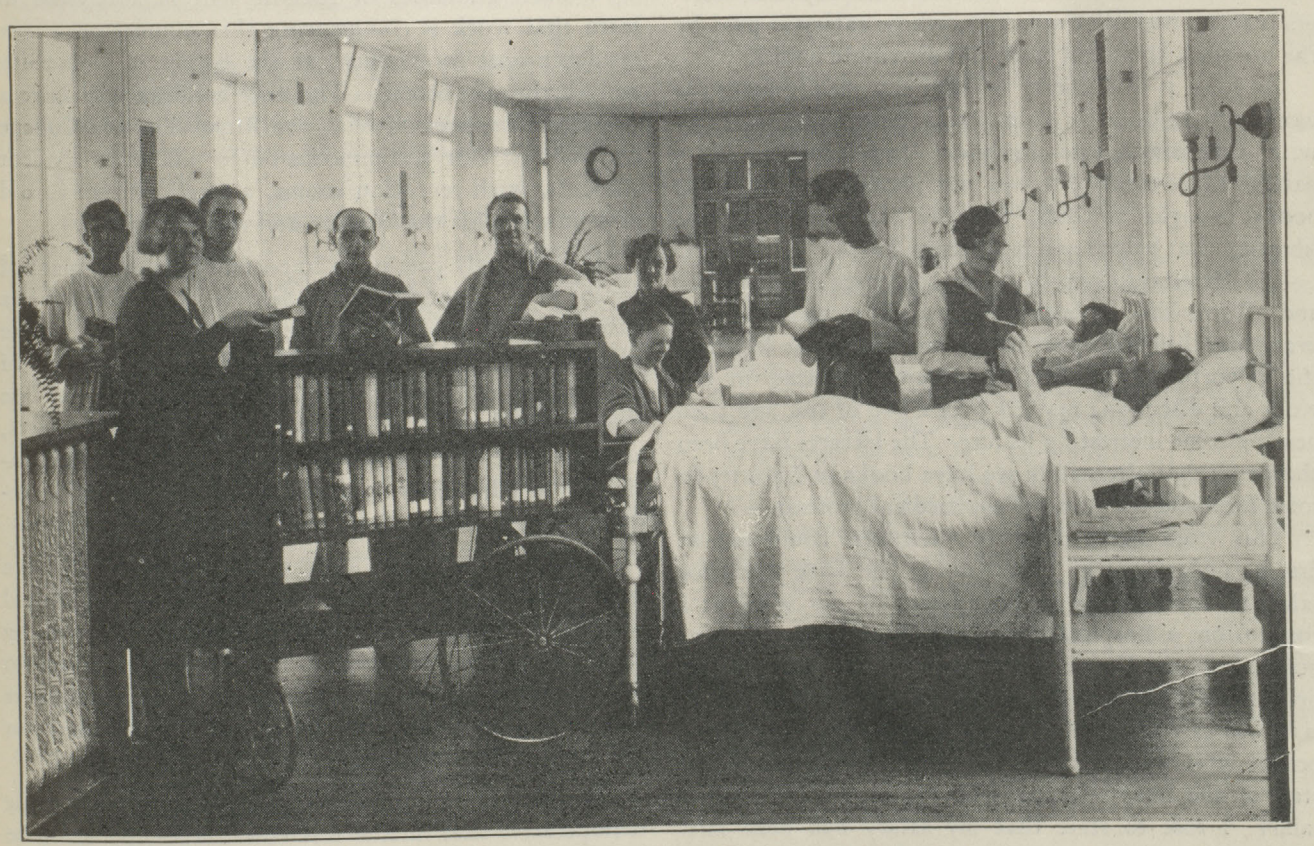
A box of my own invention that looks like a table, but has a chute in which books can be placed, is seen in the illustration. One of these is in the library, in every ward, and on every floor of the Ross Memorial and of the Women's Pavilion. These boxes reduce the number of overdue as well as lost books. Of the circulation last year of 23,607 books, only 243 were lost.

I am giving no details of the system used in all the libraries that have been established and in the two now conducted by the Library Committee. It is on the same order as that used at the McGill University Library, but with fewer details. Every book before being put on the shelves is examined, catalogued, and from then record kept of it. If it is in circulation within the limited time the card is on file in one place, if "overdue" in another, "lost" in the third place and "discarded" in a fourth.

For all others than patients, borrowers' cards are made on which is kept all information regarding the person as well as books borrowed. A proper hospital library is not for patients only, but for everyone from the charwoman to the superintendent, and both our libraries are thus used. It is a joy to give to the young men and women working in the offices and all departments their books each day, without charge, though it is from them we collect the fine of two cents a day for overdue books.

To carry on this work there is an organization which I think may be described in three parts:

(1) *The Committee*. The Convenor is elected annually by the McGill Alumnæ Society. No limit is made on the number of times this office may be held, and I have now accepted it for the tenth consecutive year, previously having been secretary-treasurer. The former convenors were Miss Georgina Hunter and Miss Bessie Hall. The Convenor has the power of choosing her own committee, which for the past three years has been a "cabinet", each member being the head of some department, and I trying to keep everything running



DISTRIBUTION OF BOOKS IN A WARD OF THE ROYAL VICTORIA HOSPITAL.
Every day in the year, Sundays, Christmas, and New Year's Day excepted, wards are visited by the library wagon and volunteer librarians, the patients in 650 beds receiving the opportunity to borrow books at least twice in each week. No charge for this privilege is exacted.

smoothly, which means about five hours' work each day. The committee for this year is:

President of McGill Alumnæ Society	
Secretary	Miss Dorothy Mathewson
Treasurer	Miss Helen Kydd
Cataloguing	Miss Mabel Corner
	Miss Grace Gardner
Workers	Miss Charlotte Owens
	Miss Hope MacIntosh
Book-buying	Miss Elsie Johnson
Supervision of Shelves and Mending of Books	Miss Christine Rorke
Visits to Ste. Anne's	Miss G. Hunter
	Miss Winifred Kydd
Medical Representative	Dr. Jessie Scriver

(2) *Volunteer Workers for the R.V.H.* We have no difficulty in securing workers, in fact we now keep a waiting list. Knowledge of books as well as condition of patients is demanded, but personality is considered first and foremost when choosing workers. In the fall of each year a schedule is made up of two regular workers for every day of the week and the wards they are to visit. If anyone is not able to be present on her day, arrangements must be made by herself with one of the substitutes on the list. For the ten years the only days missed have been Sundays, Christmas and New Year's Day. During the summer months, when the volunteer workers go on their vacations, we employ an undergraduate of McGill University, whose salary is paid by the hospital, to attend daily and distribute books.

As long as this library is under our management the work will be done by volunteers. They come each day with enthusiasm and freshness from outside. As a patient said recently, it was not perhaps so much the books brought to him, but the enthusiasm of the librarian that helped and brightened his stay in R.V.H.

(3) *Hospital Library Book Club*, composed of committee and all workers in both libraries. This club has met every month for the past two years. Everyone has thus the opportunity of meeting others interested in the work and discussing matters over a cup of tea, and then hearing some interesting lecture. The lectures have been chosen so that alternately we have books or libraries in some form and the views of the medical profession.

This work being done by volunteers could not at first be understood by others doing the same work for salaries. After giving an hour's talk on our work at a convention, a hospital librarian holding a government position in the United States at once rose to state her opinion that the work done in Montreal could not be classified as voluntary, as it was all organized under one person who was a trained librarian, a member of the staff of the hospital, and who, of course, received a salary. I rose to state that my salary had been misunderstood. "It is something I consider far more valuable than money—the thanks and appreciation of the patients and the co-operation of doctors and nurses."

As a result of this address and another given at the convention of the American Library Association two years ago, our work has become well-known all over the continent and I have become a member of the Hospital Library Committee of the A.L.A., whose headquarters are at Chicago—the only Canadian and only volunteer librarian on this committee!

The success and great advancement of the work in the past years is due to the true and faithful endeavours of everyone connected with it and to the co-operation of the hospital staffs. I may honestly say I had such an ideal before me, but never dreamed we would reach it in my lifetime. But it is not the time for the McGill Alumnæ Society, the volunteer librarians, the Library Committee or the convenor to rest upon their honours. This success must not flow like wine to our heads, but must fill us with awareness of more responsibility. It is for us all to set a higher goal which I know many of us have done, and to be filled with enthusiasm that will enable us to do everything possible to reach it.

* * *

An Extension to the R.V.C.

Women graduates of McGill will be interested to learn that work is commencing this summer on a new residence unit for women, at the corner of University and Sherbrooke Streets. The new building will have a one-storey connection with the Royal Victoria College and will provide accommodation for about 70 resident students, with reception rooms, a small infirmary, and new quarters for the Warden and resident staff.

It forms only part of an important extension planned for the R.V.C., and the remainder will be undertaken at a date when additional funds are available. The complete plans include an extension in the grounds at the rear of the College, to provide a gymnasium larger than the one now in existence, a swimming pool, badminton courts, and adequate quarters for the School of Physical Education. An additional sum of $150,000, however, is required before the plans can be carried to completion.

The funds for the building of the residence unit have been accumulated by good management of the Royal Victoria College, which was generously endowed by Lord Strathcona, but which has to date received no endowment from any other source, and which has never asked for support from the endowment funds raised for the University in general.

The increasing number of women students has made it imperative that further residential accommodation be provided and also more adequate quarters for day students. The new building will be ready for use for the session of 1931-'32.

Annual Meeting of The McGill Alumnæ Society

The annual meeting of the Alumnæ Society was held in the Royal Victoria College, on May 20th, with the President, Mrs. A. V. Seferovitch, in the chair.

The report of the Recording Secretary, Miss Helen Hague, for the Year 1929-'30, read in part as follows:

"The McGill Alumnæ Society has had a most successful year both from the social and financial aspect. . . . It was decided this year to raise our funds by a series of small 'bridge' parties, given at the University Women's Club and the Themis Club. These parties, which were arranged by Miss Virginia Cameron, the most capable chairman of a most capable committee, were most popular and proved a great success. It seems to have been a better idea to have many small parties rather than one large one; the Society incurs less expense and more people are enabled to take tickets when there is a choice of different dates.

"This year the Society has enjoyed a new issue of the McGill Alumnæ Directory. Thanks in a great measure to the work of your Treasurer, the new Directory has brought the names and addresses of the women graduates thoroughly up to date, and owing to the help given by the McGill Graduates' Society, we were put to no expense.

"The McGill Alumnæ Society has now a membership of some 250, and, while this is more than that of last year, the President and the Executive Committee feel that this number could be improved upon. The Society is doing excellent work in different directions, notably that of the Hospital Libraries and the University Settlement, but its work could afford to be extended and increased and this can only be done with a large membership.

"The Society has been singularly happy in the lecturers who have addressed the members at the various monthly meetings this year. Our thanks are due to Canon Gower-Rees, Madame Kveton, Miss Cameron, Mr. Falk, Miss Macnaughton, Mr. McCulloch, Madame Peuch and Miss Kae Campbell."

The report of the Treasurer, Miss Emma G. Lawlor, showed total receipts of $1,760.86, of which sum $406.79 were raised by the "Alumnæ Bridges." Disbursements for the year totalled $1,240.84, including the Society's contribution of $251 towards the Canadian Federation of University Women's Scholarship, $100 to the University Settlement, and $200 to the Alumnæ Library Committee, leaving a balance on hand of $520.02.

It was decided at the meeting to contribute $100 towards a Vocational Bureau, in connection with the Canadian Federation of University Women, for enquiring into openings for College women.

The following officers were elected for the coming year:

President, Mrs. George McDonald; *Vice-Presidents*, Mrs. A. V. Seferovitch, Mrs. M. A. Phelan, Mrs. Alan Bone, Miss Helen Hague; *Recording Secretary*, Miss Evelyn Wilson, and *Assistant Secretary*, Miss Helen Gillies; *Corresponding Secretary*, Miss Ruth Harrison, and *Assistant Corresponding Secretary*, Mrs. Victor LeDain; *Treasurer*, Miss Virginia Cameron, and *Assistant Treasurer*, Mrs. F. G. Charters; *Alumnæ News Board*, Miss Marion Young, Miss Muriel Wilson, Mrs. Walter Vaughan, Miss Gryan; *Representatives to Local Council of Women*, Miss Winifred Hibbard, Mrs. Walter Simpson; *Representative to the University Settlement*, Miss Louise Shaw; *Convenor of the Library Committee*, Miss Inez Baylis.

Alumnæ Notes

Miss Hilda Diana Oakley, first Warden of the Royal Victoria College, has recently been granted the degree of D.Litt. by the University of London. Miss Oakley, well-known as a lecturer and writer on Philosophy, never fails to refer gratefully to her first degree, as granted by McGill at the first convocation after her arrival here. She had lately passed her final examinations at Oxford with the greatest distinction, but in those days Oxford did not grant degrees to women.

1909—Jessie McDonald recently married Mr. Martin Armstrong and is living at Sutton, North Pulborough, Sussex, England.

1912—Mrs. Edward Woodhouse (Chase Going), Managing Director of the Institute of Women's Professional Relations, a research organization sponsored by the American Association of University Women, with headquarters at the North Carolina College of Women, is the author of Bulletin No. 1 of a series of publications issued by the organization, three volumes of which have recently appeared. Mrs. Woodhouse's contribution is a bibliography entitled "Occupations for College Women."

1913—Dr. Ethlyn Trapp (Med. '27) has recently returned from post-graduate study in Vienna, and is opening up a practise as a Children's Specialist in New Westminster, B.C.

1914—Mrs. A. E. Parlow (Grace Ryan) has left Vancouver for Prince Rupert, B.C.

1915—Dr. Gladys Story Cunningham has been appointed an interne in the Grace Hospital, Vancouver, B.C.

1920—Margaret Macnaughton, who returned to Montreal last fall after several years spent in Japan in Y.W.C.A. work, has been much in demand as a speaker. She has many interesting, and some thrilling experiences to relate, especially of her trip across Asia.

1925—Edith Baker, who has now been several months in Japan, writes most enthusiastically of her work among Japanese girls.

Mrs. Ralph Collins (Jean Gurd) sends glowing accounts of her new home in Angola, Portuguese West Africa.

1928—Margaret Greig has been awarded a Bursary of $750 by the National Research Council, for research in Cellulose Chemistry.

1929—Ida C. Greaves, the holder of the Montreal Manufacturers' Fellowship, who has been doing post-graduate work in Economics this session at McGill, has been awarded the Whitney Fellowship at Radcliffe College, the women's college of Harvard University, and will continue her work there next session.

Gwen Roberts is temporarily on the staff of the Ontario Ladies College, Whitby, Ont. Her official position is that of Director of Religious Education, but she is also teaching History and Swimming and coaching the Hockey team.

The Class of R.V.C. '29 held a dinner in Montreal on May 8th, at which Adele Languedoc presided.

The McGill Graduates of Vancouver held a most enjoyable "Bridge" on the evening of March 13th.

The members of the classes of both 1910 and 1911, who live in Montreal and vicinity, have clubs and meet regularly. It is a splendid idea when distances permit.

* * *

DEATH

Flesher—At Vancouver, B.C., on February 1st, 1930, Frederick G. Flesher, husband of Vera Gilley (past student).

Scholarship Award

Announcement was recently made of the 1930 award of the annual scholarship provided by the Canadian Federation of University Women. The successful candidate this season is Miss Mary White, B.A. '29, of Queen's University, a student with a brilliant record in the Department of Classics. Miss White, who was chosen from among 15 candidates, will proceed to a higher degree at the University of Oxford.

Information with regard to international scholarships and European fellowships open to members of the International Federation of University Women may be had from Miss C. I. Mackenzie, 1198 Seymour Avenue, Montreal.

Attention is drawn to the exceptionally fine achievements of Miss Dorothea Sharpe, 1924 holder of the Canadian Federation Scholarship. Miss Sharpe is a graduate of St. Michael's College, University of Toronto. In 1925 she was granted the scholarship for a second year in order to enable her to complete her work in mediæval philosophy at Oxford. The following year she spent in Florence, where she discovered a manuscript, previously unknown, of immense value in her work.

After returning to England, she was one of the sub-editors of the recently issued edition of the Encyclopædia Britannica. She has now completed her work for the Doctorate at Oxford, and has been awarded a five-year renewable scholarship at Sommerville College. Her thesis, "History of English Philosophy in the Middle Ages", the first treatise on the subject ever published, is being issued by the Oxford University Press.

McGill Society of Toronto

The following are the officers of the McGill Society of Toronto for the season 1930-'31:

President.....T. T. Irving, Sci. '98.
Vice-presidents.....Dr. Leonard M. Murray, Med. '00
Major J. A. G. White, Sci. '11.
Treasurer.....H. C. Davies, Sc. '08.
Secretary.....E. G. McCracken, Sc. '24, c/o Alfred Collyer & Co., 183 George Street, Toronto 2.
Committee.....W. S. Ewens, Sci. '07.
G. D. Floyd, Sci. '15.
K. D. Joseph, Sci. '13.
Dr. A. L. Lockwood, Med. '10.

The Alumnæ will hold their elections later.

Convocation

Down the avenue where countless students have walked on their way to receive honours from McGill University, the class of 1930, 456 in number, passed in stately procession on the morning of May 29th.

Led by mounted police, the parade continued down Mansfield Street and thence to the Capitol Theatre. Inside the students took their places in orderly fashion, with the professors filing up onto the stage to take their places behind Sir Arthur Currie, who presided.

Four candidates for the degree of Bachelor of Household Science were presented by Miss Bessie M. Philp; 21 candidates for the degree of Bachelor of Science in Agriculture were presented by Dean H. Barton; for the degree of Bachelor of Commerce, 32 students were presented by Dean Ira A. MacKay; for the degree of Bachelor of Architecture, six students were presented by Dean H. M. MacKay; for the degree of Bachelor of Science in Arts, 21 students, presented by Dean Ira A. MacKay; for the degree in Applied Science, 66 students, presented by Dean H. M. MacKay; for the degree of Bachelor of Arts, 67 men and 72 women, presented by Dean Ira A. MacKay; for the degree of Bachelor of Civil Law, 13 students, presented by Dean Corbett; for the degree of Doctor of Dental Surgery, nine candidates, presented by Dean Walsh; for the degree of Doctor of Medicine and Master of Surgery, 82 students, presented by Dr. J. C. Meakins; for degrees in the Faculty of Graduate Studies and Research, 16 candidates for Master of Science, 33 candidates for Master of Arts and 14 candidates for Doctor of Philosophy, presented by Dean Harrison.

The conferring of honorary degrees upon six outstanding citizens of the Empire was conducted with dignity, and the esteem in which those honoured were held was shown by the reception which the candidates received.

Dean Ira A. MacKay presented William A. Bulkeley-Evans, C.B.E., M.A., secretary of the Headmasters' Conference of England and honorary representative of McGill University in Great Britain, and Hon. Mr. Justice Lyman Poore Duff, of Ottawa, Puisne Judge of the Supreme Court of Canada, was presented by Dean Corbett.

When Miss Ethel Hurlbatt, M.A., ex-warden of the Royal Victoria College, came to receive her degree, there was hearty applause from the students, almost all of whom had known her in her official capacity at the University. She was presented by Mrs. Walter Vaughan, present warden of R.V.C.

A distinguished McGill graduate, Charles Burrard Kingston, B.A., B.Sc., of London, England, was presented by Dr. C. W. Colby, and Thomas Bassett Macaulay, Esq., LL.D., president of the Sun Life Assurance Company of Canada, was presented by Dr. J. W. Ross.

A Toronto yell greeted John Cunningham McLennan, O.B.E., Ph.D., D.Sc., LL.D., F.R.S., Professor of Physics in the University of Toronto, who was presented by Dr. A. S. Eve, who introduced him as "Fellow of the Royal Society, winner of the Royal Medal, formerly president of the Royal Society of Canada, member of the National Research Council, Ph.D., LL.D. (Toronto), D.Sc. (Manchester, Liverpool). A man of great zeal and energy, eminent in research during peace and war. A Canadian whose laboratory at Toronto is world-famed; the leading Canadian physicist today."

Nominations

Semi-annual meeting

The Nominating Committee of the Graduates' Society has chosen one candidate for each of the following offices for the ensuing term of office starting October 1st, 1930, for the Graduates' Society's representative on the Board of Governors, for President of the Graduates' Society, for first Vice-President of the Graduates' Society. This has been done in accordance with the amendment to the Society's By-Laws passed at the Annual Meeting, held in October, 1927. The following list of nominations is in the hands of the Executive Secretary:

For Graduates' Society Representative on Board of Governors; Term—three years:

P. F. Sise, B.Sc. '01.

For President of the Graduates' Society; Term—two years:

H. M. Jaquays, B.Sc. '96, M.A. '99, M.Sc. '99.

For First Vice-President of the Graduates' Society; Term—two years:

J. T. Hackett, B.C.L. '09.

For Members of the Executive Committee, two to be chosen by ballot of the members of the Graduates' Society; Term—two years:

Miss M. F. Hadrill, M.A. '05.

P. P. Hutchison, B.A. '16, B.C.L. '21.

J. G. Notman, B.Sc. '22.

G. McL. Pitts, M.Sc. '09.

For Members of the Council of the Graduates' Society, five to be chosen by ballot of the Members of the Graduates' Society; Term—two years:

W. W. Colpitts, M.Sc. '01, LL.D. '21.

Miss L. M. Fair, M.A. '24.

G. G. Gale, M.Sc. '05.

J. Grant Glassco, B.Com. '25.

K. D. Joseph, B.Sc. '13.

A. L. Lockwood, M.D. '10.

George S. MacCarthy, M.D. '94.

W. G. Mitchell, M.Sc. '14.

T. R. B. Nelles, M.D. '05.

R. V. Slavin, B.Sc. '10.

Representative Fellows, one each to be elected by the Graduates at large; Term—three years:

In Arts.....J. W. Jeakins, B.A. '13.
Harry Newman, B.A. '06

In Science.....R. J. Durley, B.Sc. '98.
R. R. MacDonald, B.Sc. '07.

In Dentistry.....H. Ross Cleveland, D.D.S. '15.
John S. Dohan, D.D.S. '19.

In Music.....Dorothy Armstrong, Mus. Bach. '16.
A. E. Whitehead, Mus. Doc. '22

* * *

The Chicago Branch

At a meeting of the McGill University Graduates' Society of Chicago, held at the Palmer House, Chicago, on March 21st, J. P. Ball (Sci. '87) presided and C. W. Stokes (Sci. '03) was appointed Secretary *pro. tem.* Speakers at the meeting included Dr. J. B. Loring, M.R.C.S. (Med. '83), D. E. McMillan (Sci. '84), J. A. Eugene Vinet (Sci. '11), C. B. Magrath (Sci. '10), Professor J. Viner (Arts '14), and J. R. Frith.

* * *

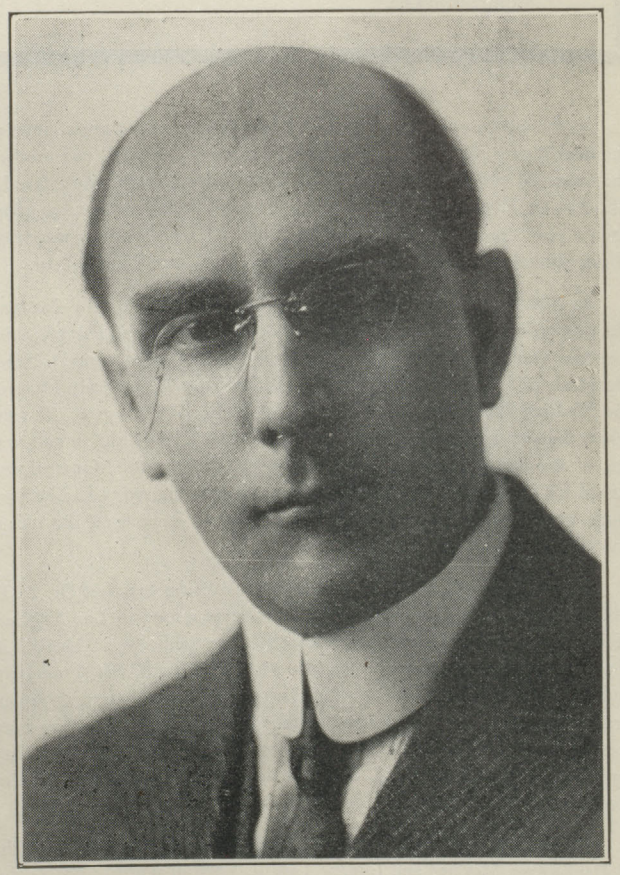
The Detroit Branch

The first meeting of the McGill Alumni Association in Detroit in the last two years was held at the Imperial Hotel. Dinner was served with a meeting following. There were seventeen McGill Alumni present.

Election of officers for the ensuing year resulted as follows:

President.....J. A. Heaman.
Vice-President.....L. C. Reid, M.D., Fisher Bldg.
Secretary-Treasurer.....Harold U. Mair, M.D., Professional Bldg.

Motion carried, "that the Society would meet twice a year on the first Saturday of the months of March and October."



J. A. HEAMAN (Sci. '02)
President, Detroit, Michigan, Branch, Graduates' Society of McGill University

The Graduates' Society records with deep regret the deaths of the following Alumni:

DOBERER, CAMERON (Sci. '29), on April 9th, 1930, in Montreal, P.Q.

DRAPER, DR. LAWRENCE (past student, Med '92), recently in San Francisco, California.

FERGUSON, JOHN STEWART (Arts '61), on October 7th, 1929, in Montreal, P.Q.

FORSTER, DR. JOHN FERGUSON COOK (Med. '02), on February 13th, 1930, at Holyoke, Mass.

HOCKRIDGE, DR. THOMAS G., M.R.C.S. (Med. '74), on January 12th, 1929, in London, England.

KER, LIEUT.-COL. ROBERT HAROLD (Arts '97, Med. '01), on March 13th, 1930, in London, England.

LAFLEUR, EUGENE (Arts '77, Law '80, LL.D. '21), on April 29th, 1930, in Ottawa, Ontario.

LAFOREST, GUY BEAUVAIS (Sci. '11), on April 26th, 1930, in Montreal, P.Q.

LARIVIERE, THE REV. DOLLARD (Arts '84), on April 7th, 1930, in Montreal, P.Q.

GRINDLEY, FREDERICK H. (Agr. '11), on February 15th, 1930, in Ottawa, Ont.

MCBURNEY, CHARLES (Arts '97), on January 15th, 1930, in Montreal, P.Q.

MCCONNELL, DR. JOHN BRADFORD (Med. '73), on April 5th, 1930, in Montreal, P.Q.

MCCORD, DAVID ROSS (Arts '63, Law '67, LL.D. '21), on April 12th, 1930, at Guelph, Ontario.

MILLER, DR. ALLAN PERCY (Med. '05), on February 19th, 1930, in Los Angeles, California.

MUCKEY, DR. FLOYD S. (Med. '83), on March 4th, 1930, in New York City.

PATRICK, DR. DAVID (Med. '96), on February 25th, 1930, in Montreal, P.Q.

PEDLEY, THE REV. HILTON (Arts '88), on March 25th, 1930, at Claremont, California.

POWERS, DR. LAFONTAINE BALDWIN (Med. '67), on February 22nd, 1930, at Port Hope, Ontario.

ROBERTSON, DR. JAMES W., C.M.G. (LL.D. '09), on March 19th, 1930, in Ottawa, Ontario.

ROBERTSON, THE REV. JOHN C. (Arts '96), on April 20th, 1930, in Toronto, Ontario.

STEVENS, WILLIAM HENRY (Arts '79), on February 4th, 1930, at Lindsay, Ontario.

WALKER, HERBERT FRASER (Arts '12), on May 15th, 1930, in Montreal, P.Q.

In the quarter since the last issue of the *News* went to press, news of the deaths of a number of prominent graduates of McGill has reached the offices of the Graduates' Society. From England came word that Dr Thomas G. Hockridge, M.R.C.S., died at his home in London more than a year ago, and that Lieut.-Col. R. H. Ker, M.D., who was travelling abroad with his family, had died in London on March 13th.

In addition to these physicians, who died abroad, the Medical Faculty suffered severe loss through the death of Dr. David Patrick, who for more than thirty years had served on the staff of the Montreal General Hospital, and through that of Dr. J. B. McConnell, formerly Dean of the Medical Faculty of the University of Bishop's College at the time when that institution amalgamated with McGill. Dr. McConnell was one of the founders of the Western General Hospital of Montreal and served for many years on its staff. Dr. L. B. Powers, who died in Port Hope on February 22nd, aged 87, was said to have been the oldest practising physician in Canada.

From California, news has been received of the death of Dr. A. P. Miller, formerly of Chatham, Ontario, who practised in Los Angeles, of Dr. Lawrence Draper, who, after studying medicine at McGill in 1892-'94, graduated from the Cooper Medical School, San Francisco, and of the Rev. Hilton Pedley, for many years a missionary in Japan. From the opposite coast of the United States, information has been received of the deaths of Dr. F. S. Muckey, who died in New York City on March 4th, and of Dr. J. F. C. Forster, a well known surgeon of Holyoke, Mass., who died on February 13th.

The Faculties of Arts and Law are joined in regret by the deaths of David Ross McCord and Eugène Lafleur, both of whom were graduates of both faculties. Eugène Lafleur, as mentioned elsewhere in this number of the *News*, held a place unique in the legal circles of fhe Dominion; and David Ross McCord, a loyal and generous graduate to McGill, will be remembered through the merit of his life's work and the excellence of the National Museum at McGill, which bears his name and owes all to his enthusiasm, skill, and knowledge as originator.

In addition to the losses shared with the Faculty of Law, the Arts Faculty mourns the deaths of John S. Ferguson, which occurred last autumn at his home in Montreal; of W. H. Stevens, who died in Lindsay, Ontario, on February 4th; of Herbert F. Walker, Vice-President of Canadian Fairbanks-Morse Co., who died on May 15th; and of Charles McBurney, one of the outstanding figures in the educational work of the Province of Quebec, which occurred in the Western Division, Montreal General Hospital, on the afternoon of Wednesday, January 15th. Through the deaths of the Rev. J. C. Robertson in Toronto, and that of the Rev. Dollard Lariviere in Montreal, Canada is deprived of two educationalists whose work was of the greatest value.

Younger than the majority of the McGill men whose names are recorded on this page was Cameron Doberer (Sci. '29), who died in the Royal Victoria Hospital, Montreal, on April 9th, as a result of an explosion the previous day in a powder factory at Beloeil, P.Q. Details of the cause of the explosion are unknown, but it was severe and Cameron Doberer, though fifty feet away at the time, suffered injuries too severe to permit of recovery. The Science Faculty, but a few weeks after Mr. Doberer's death, suffered a further loss through the death in Montreal of Guy B. Laforest, General Manager of the Appraisal Corporation of Canada.

Dr. J. W. Robertson, C.M.G., who died in Ottawa in March, was formerly principal of Macdonald College, and F. H. Grindley, who predeceased him by nearly a month, was a graduate in Agriculture, was Secretary of the Canadian Society of Technical Agriculturists, and Editor of *Scientific Agriculture*.

SUPPLEMENT

TO

THE McGILL NEWS

A Quarterly Publication

PUBLISHED BY THE GRADUATES' SOCIETY OF McGILL UNIVERSITY, MONTREAL

NUMBER 2 JUNE, 1930

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* * *

OUR CONTRIBUTORS

DR. W. W. CHIPMAN is Emeritus Professor of Obstetrics and Gynæcology at McGill University, and an internationally known authority on his subject.

DR. W. B. HOWELL, a graduate of McGill University, has frequently contributed to our columns.

H. R. MORGAN, Alumni Editor of the *McGill News*, is on the Editorial Staff of the *Brockville Recorder*.

Sympathetic Powders and Weapon Salves*

By

W. B. HOWELL

" . . . la faculté de douter est rare parmi les hommes: un très petit nombre d'esprits en portent en eux les germes, qui ne se développent pas sans culture. Elle est singulière, exquise, philosophique, immorale, transcendante, monstrueuse, pleine de malignité, dommageable aux personnes et aux biens, contraire à la police des Etats et à la prospérité des empires, funeste à l'humanité, destructive des dieux, en horreur au ciel et à la terre."

. . . . . ANATOLE FRANCE.

ONE midsummer afternoon in the year 1661 certain grave gentlemen, members of the Royal Society, were seated around a table upon which some powdered unicorn's horn had been arranged in the form of a circle. In the middle of the circle a spider was placed and immediately ran out. This was a momentous action on the part of the spider, for it destroyed the tradition, handed down over centuries, that a spider would not cross a line of powder made from the horn of a unicorn. Many strange subjects occupied the attention of the early members of the Royal Society. One member was directed to make a powder of the dried livers and lungs of vipers and to see if it would germinate and produce young vipers. Another member took a live carp out of water and hung it up in his cellar. He fed it with sack and bread from a spoon. He stated in his report that so far as he could see, the fish did not swallow its food. In fact it died in four or five hours.

At one of the meetings a Mr. Aubrey presented the Society with the plan of a cart which had legs instead of wheels. At another a Dr. Merrill told a story of a caulker who could "manage his breath" so well that he was able to stay under water for half an hour at a time, while repairing the bottom of a ship.

Not all the subjects considered were so nonsensical as these, however. There were eleven papers in the first few numbers of the Philosophical Transactions, the official publication of the Society, upon the subject of blood transfusion, and some about the regeneration of cut nerves. King Charles the Second is said to have laughed "mightily" when he heard that the members were spending their time weighing air.

A subject at which the Merry Monarch might excusably have laughed was the sympathetic powder. This was a remedy for wounds. It was not intended for application to the wound itself, but to blood from the wound. The first member to read a report upon it was Sir Gilbert Talbot. The following is an extract from his paper:

"An English mariner was wounded at Venice in four severall places soe mortally, that the murderer took sanctuary: the wounded man bled

*Read before a meeting of the Montreal Medico-Chirugical Society, May 16th, 1930.

three days without intermission; fell into frequent convulsions and swoonings; the chirurgeons, despayring of his recovery, forsook him. His comrade came to me, and desired me to demand justice from the Duke upon the murderer (as supposing him already dead); I sent for his blood and dressed it, and bade his comrade haste back and swathe up his wounds with clean linen. He lay a mile distant from my house, yet before he could get back to him, all the wounds were closed and he began to be visibly comforted. The second day the mariner came to see me and told me that his friend was perfectly well, but his spirits so exhausted that he durst not adventure soe long a walke. The third day the patient came himself to give me thanks, but appeared like a ghost; noe blood left in his body."

Talbot told his fellow members that his mysterious medicine was "compounded of a Zaphyrian salt, calcined by a celestial fire, operating in Leo and Cancer into a Lunar complexion." The sympathetic powder was a subject of special interest to another member, Sir Kenelm Digby, a versatile person, who was something of an amateur doctor. Digby had known about the sympathetic powder many years before the Royal Society came into existence. In 1658 he had published a book with the title "A Late Discourse made in a solemne Assembly of Nobles and Learned men at Montpellier in France. Touching the cure of wounds by the Powder of Sympathy: with instructions how to make the said Powders, whereby many secrets of Nature are unfolded." The least interesting part of the discourse is the long and obscure explanation of the action of the powder. Much more interesting is the author's account of how he used it on James Howell, the writer of the Epistolæ Hœlianæ, "the priggish little clerk of King Charles' council" as Thackeray called him. Howell had tried to separate two of his friends who were fighting a duel, and having taken hold of one of their swords by the blade, had been, not unnaturally, badly cut about the hand. The combatants stopped fighting, embraced one another and bound up Howell's wounds, using his garters for the purpose. King James the First was on the throne at the time. According to Digby, the King "much affected the said Mr. Howel", and sent his own surgeon to treat him. In spite of the application of plasters, or perhaps on account of them, the hand swelled and became very painful. Howell then went to Digby for help, "for I understand," said he, "that you have extraordinary remedies upon such occasions." Digby took one of the garters which had been used to bind up the injured hand and put it into water in which he had dissolved some of his sympathetic powder. No sooner was this done than Howell, who was standing in a corner of the room, not taking any notice of what Digby was doing, "started violently as if he had found some strange alteration in himself. 'I know not what ails me', he said, 'but I have no more pain, methinks that a pleasing kind of freshness, as it were a cold napkin did spread on my hand, which hath taken away the inflammation that tormented me before." Digby then directed his patient to throw away the plasters he had been using and to keep the wound clean. After Howell had gone, Digby took the garter which had been treated with the sympathetic powder and dried it before the fire. Shortly afterwards Howell's servant came running in to say that the pain in his master's hand was as bad as ever. Digby put the garter back into the solution of sympathetic powder and the pain was again instantly relieved. King James heard of the cure, sent for

Digby, and after jocularly accusing him of being a "magitian or a sorcerer" demanded particulars of the powder. Much against his will, Digby revealed the secret. Before long it became generally known and Digby complained "that now there is scarce any country Barber but knows it". There was nothing very complex about the powder. It was copper sulphate. The healing powers were developed by preparing it in a special way. It had to be dissolved and re-crystallized. The crystals had to be exposed to the sun during the months of June, July and August, after which it was finely powdered and while hot put into a container and kept from the influence of sunshine.

Similar to the sympathetic powder was the weapon salve or "armary unguent", an ointment which was applied to the weapon with which a wound had been inflicted. The weapon, or a piece of wood or iron resembling it, was smeared with blood from the wound and put into the "unguent pot", while the wound was kept clean by covering it with a piece of clean linen moistened with white wine or the patient's urine.

There were various formulæ for weapon salves. That of Paracelsus was as follows: "Take of the moss that groweth upon a scull, or a bone of a dead body that hath lain in the Air, to wit, 2 drachms, of a man's grease 2 drachms, of a mummy and man's Blood each ½ oz., Linseed Oyl 2 drachms, Oyl of Roses and Bole Ammoniack each 1 drachm. Let them be all beat together in a mortar so long until they come to a most pure and subtil oyntment". Some authorities held that the skull from which the moss was taken should be that of a man who had been hanged. The superiority of such moss being due to the fact that in the act of death the vital spirits were prevented by the constriction of the neck from retreating to the head. The vital and the animal spirits became mixed together and with the help of heat and moisture produced a growth of moss, or as it was sometimes called, "usnea." One authority held that it was not necessary that the skull should have been that of a man who had been hanged. It would do equally well if he had been broken on the wheel.

Among the learned there was a good deal of disagreement about weapon salves. Francis Bacon considered the subject worthy of discussion in his Natural History, though he affirmed that he was "not as yet fully inclined to believe in it." He points out the great difficulty in getting some of the ingredients, though so far as the moss from the heads of men who had been hanged was concerned, there was a great quantity to be obtained in Ireland.

Tracts were published, in some of which sympathetic cures were attacked, in others defended. Some objectors said that, while the efficacy of the cure could not be denied, it was not a fit remedy to use, because magic was employed in making it. John Baptist van Helmont, in a tract which he published, under the title "A Ternary of Paradoxes", spoke with some disapproval of Sir Kenelm Digby's "experiment in tossing the life of Master Howel from hazard to safety, from safety to hazard and back to durable safety again, at pleasure". He stoutly defended such cures from the imputation that they were due to magic. His explanation of the curative power of the weapon salve was that "it sucks out of the wounded parts, the exotick and dolorous impression, diminishing it by a medical power, exileth it: which medical virtue being the puissant conqueress of the evil, is partly excited in the blood, and partly ingenerated in the same by the unguent, that is, by the spirit of the unguent, upon the magic of its phansie, *i.e.*, its created

endowment, thus exercising imperial power and efficacious sovereignty over the spirit of the blood." Magniloquent but inadequate explanations such as this are common in seventeenth century scientific literature.

The weapon salve was attacked by a clergyman named Foster in a pamphlet, the title of which was "Hoplocrisma Spongus, a Sponge to wipe away the weapon salve. A Treatise wherein is proved that the cure late taken up amongst us, by applying the Salve to the Weapon, is magical and unlawful". Foster held that the "stinking weapon salve," as he indignantly called it, "was a new invention of the Devill, an old Imposter." He brands Paracelsus as a witch and a conjurer. "In the use of this salve," he says, "though there be no expresse and open, yet there is a tacite and implicite contract with the devill". The reverend author's knowledge of the devil and his ways is shown by his writings to have been fairly intimate. "Witches and impes of the devill," he says, "when they go a-hagging anoynt themselves, and are suddenly carried into remote places through the air, riding upon a broome, a hogge, a goate, or the like; and the devill makes them believe that this transportation is naturally effected by virtue of their medicament. But in very deed these their oyntments (which are made among other things, of the fat of infants) do not do the feate, but the devill himself carried them." In support of his opinion, Foster quotes the pronouncements of the Universities of Louvain and Douai, that the weapon salve is "not natural, but superstitious, magical and diabolical."

The other side of the controversy was championed in a tract entitled "Doctor Fludd's Answer unto Master Foster, or the Squeezing of the Parson Foster's Sponge, ordained by him for the wiping away of the Weapon Salve." Fludd speaks of a "certain noble Personage of this kingdom who at first scoffed at the weapon salve. Then was convinced that it was true indeed but was afraid to use it." However, a "learned divine and well-esteemed Doctor of Physicke" assured him that "there was neither any damnable superstition in the making of the ointment, as was falsely suggested: nor any cacomagical disposition of the ingredients." This noble personage was probably the Duke of Buckingham.

It was alleged by another writer, in refutation of the charge of magic, that no superstitious rites were performed when the ingredients of the ointment were mixed, no mysterious words pronounced, nor any sacred things profaned. Moreover, a patient cured by magic would have a long convalescence, would suffer from great loss of strength and from "an alienation of the minde, a laesion of some more noble facultye, and success of some notable misfortune."

Belief in sympathetic cures had its origin, partly at all events, in reasoning by analogy from phenomena which were not understood. The magnetic needle was observed always to point to the north, though there was no apparent reason why it should do so. Water was supposed to run through a siphon because it was attracted by some unknown force. Epidemics spread, often without any apparent contact between the victims. There was a belief in the seventeenth century that a murdered man's wounds would bleed if the murderer came into the presence of the corpse. Bleeding would not occur if death had been brought about legally by an executioner. This phenomenon was looked upon as due to some sort of sympathetic action. Another example

culled from the popular fancies of the day was the action of music in curing tarantula bites. Sir Kenelme Digby discussed various examples of sympathetic action before his "learned and noble audience" at Montpellier. He said that if a physician when examining a wet nurse should boil a specimen of her milk she would feel severe pain in the breasts and nipples. Similarly the custom of English peasant women of putting salt in the fire when a vessel containing milk boils over was to prevent the cow having "some hurt upon her udder." He told as an example of sympathetic action, the case of a person who had a birth mark which resembled a mulberry in colour and shape, and "did swell, grow and itch" every year in the mulberry season.

Fraser, in the "Golden Bough," says that beliefs similar to these exist to the present day in some country parts of England. In Suffolk, if a farm labourer cuts himself with a billhook or a scythe, he oils the blade to prevent the wound from festering; or if a horse wounds its foot by treading on a nail, the groom keeps the nail, cleans it and greases it every day. In Essex if a man is stabbed, the knife is greased and laid across the bed in which he is lying.

To understand why intelligent people as recently as the seventeenth century held beliefs which a modern child of ten would laugh at, it is necessary to consider the state of civilization at the time. The credulity which is so marked a characteristic of the seventeenth century mind was a legacy of the middle ages. During that period—it lasted a thousand years—Europe was under the domination of the church. All learning, except that which was Jewish or Mahommedan, was in the hands of churchmen. Few laymen could either read or write. It was a commonplace of religious teaching that only a select few went to heaven when they died. Most Christians, and all who were not Christians, were doomed to everlasting flames. Satan loomed very large. How firm the belief in him must have been is shown by an incident which Martin Luther related. Luther said that he was quite accustomed to the devil prowling about the cloisters of the monastery at Erfurt. One night he was aroused from his sleep by a noise in his cell. Finding that the disturbance was due to nothing more important than the presence of the devil, he turned over and went to sleep again.

Sir Thomas Browne also had a very vivid sense of the reality of the devil, and even credited him with a certain purposeful self-abnegation. "Lastly, to lead us farther into darkness," he says, "and quite to lose us in the maze of error, he would make men believe there is no such creature as himself." Besides Satan, it was believed that there were myriads of invisible spirits of evil to tempt mankind. It was these powers of evil, acting as instruments of the Deity, that brought storms, earthquakes and famines, to punish man for his sins. Other expressions of the divine will were comets, eclipses and rainbows. Apparitions and miracles were commonplace affairs.

It was, in that unsceptical age, easy to believe. Faith was the greatest of virtues, and unbelief the greatest of sins. The spirit of Tertullian, who in the third century, had said, "I believe it because it is impossible," inspired Sir Thomas Browne in the seventeenth when he wrote "and this I think no vulgar part of Faith to believe a thing, not only above, but contrary to reason, and against the argument of our proper senses."

The progress of the human mind towards intellectual freedom was not impeded by religion only, but also by the insecurity of life and property

which resulted from frequent wars, famines and pestilences. The struggle for existence was too fierce to allow of men outside the church occupying themselves in intellectual pursuits. It was the credulity begotten of ignorance and fostered by the church which explains the tragic folly of witch-craft and the prevalence of the pseudo-sciences, alchemy and astrology.

It would have required a rare independence of mind to doubt the existence of witch-craft when belief in it was practically universal. The most intellectual men of the age believed in it. There was no doubt about it in the mind of Francis Bacon. Sir Thomas Browne held it a sin not to believe in it. "For my part," he wrote, "I have ever believed and do now know, that there are witches: they that doubt of these do not only deny them, but spirits; and are obliquely and upon consequence a sort, not of Infidels but atheists." As recently as the middle of the eighteenth century no less a person than John Wesley said that "not to believe in it was to give up the credit of all history, sacred and profane." When such men as these did not doubt it, it is not to be wondered at that the mass of the people believed. Were there not laws in all countries against it? Were not hundreds of people—most of them, by the way, forlorn old women—burned every year for injuring, or trying to injure, their neighbours, by means of it? Did not the church denounce it as a deadly sin, and quote the Bible as its authority for doing so?

So real was the belief in witch-craft that many people who were accused of it believed that they were guilty. They had used the ritual of the sorcerer to cast spells. If harm had befallen the object of their malice they had taken credit to themselves for it. If their spells and incantations met with no success they attributed their failure to what the modern surgeon would call "a fault in technique"—and went on believing. Under the influence of persecution or torture, or as a result of an enfeebled mind, old women made strange confessions. More than one admitted that she had been present at a witches' sabbath. One confessed to having flown out over the North Sea on a broom handle.

Belief in alchemy, like belief in witch-craft, was not without its apparent justification. The alchemists had a certain amount of excuse for persisting in their efforts to transmute the baser metals into gold. They immersed iron in copper sulphate solution; the copper was deposited on the iron and they believed that they had turned iron into copper. They turned copper white by treating it with arsenic and believed they had made silver. They boiled water until it had all disappeared and found that a sediment remained. This experiment proved to them that water could be turned into earth.

Astrology, out of which the science of astronomy grew, gave the stars credit for more interest in the affairs of man than his importance in the universe seems nowadays to justify. From the knowledge that the sun sustains life on the earth, and that the moon was concerned in the causation of tides, grew the belief that the other heavenly bodies had their influences.

Comets were the chief objects of interest. They were believed to be the heralds of important events, usually catastrophes, to mankind. Such beliefs seemed resonable enough, because within a year or two of the appearance of a comet, there was sure to be a pestilence, a war, a famine, or an earthquake in some part of Europe. If it portended nothing more important, the purpose of the comet might be to announce the approaching death of a king. This

made comets a matter of special interest to royalty. A King of Portugal is said to have resented the untimely appearance of a comet to such an extent that in his rage he fired his pistol at it. Halley's comet did actually influence the history of England, when it appeared in 1066, by encouraging the Normans and discouraging the English. William the Conqueror pointed it out to his followers as an indication of his approaching triumph. The English, unfortunately for the morale of their army, took it as a herald of their defeat. A comet appeared shortly before the plague and fire of London in 1666, and excited a great deal of interest and apprehension. Pepys refers to it in several places in his diary. His first reference to it is preceded by the statement that he had been "up and down to look for a place *pour rencontrer la femme de je sais quoi*". Had he been a king he might have taken the comet as a hint to mend his ways.

But the time for paying attention to the warnings of comets was passing. Two centuries earlier the middle ages had come to an end, and the Italian Renaissance had begun. Mankind, instead of looking upon life as a prelude to damnation, then awoke to a realization that the world is a very beautiful and interesting place. Trade flourished, wealth accumulated and life became easier. Learning spread beyond the limits of the church, because laymen now had leisure for intellectual pursuits. A voracious appetite for knowledge developed. The invention of the compass and the rudder led to the exploration of the world. America was discovered, Vasco de Gama sailed round Africa, and Magellan round the world. The introduction into Europe of paper and the invention of printing caused a rapid increase in the spread of knowledge. Copernicus, exploring the skies, proved that the sun is the centre of the planetary system, and that the earth revolves around it, instead of being the centre of the universe as the theologians taught.

Leonardo da Vinci, "the incarnation of the true spirit of the Renaissance," taught the importance of observation and experiment in the pursuit of scientific knowledge. New knowledge led to more scepticism, and scepticism to more knowledge. Respect for authority waned. Loss of confidence in the church and its teaching led to the Reformation. For one hundred and fifty years Europe seethed with religious wars, massacres and persecutions. The sword, the thumb-screw, the rack and the faggot, were used to keep people in the path of orthodoxy, but in vain. The saying of a pagan a thousand years before was amply verified: "There are no wild beasts so ferocious as Christians who differ concerning their faith." In spite of opposition, rationalism went on flourishing. In England the efforts of government to force religious belief on the people were rapidly coming to an end at the time of the Restoration in 1660. The repression from which people had suffered under puritan rule was followed by a violent reaction: religion and even morality were held up to ridicule. It became fashionable to be a sceptic and to be interested in scientific inquiries. The formation of the Royal Society was a sign of the times. It received its first charter from King Charles Second in 1662. A great intellectual improvement was taking place at this time as a result of the throwing off of the shackles of tradition. When the Royal Society began its career practically all educated people believed in witch-craft. By 1688—only sixteen years later—the majority of them disbelieved in it. And this change was brought about, not by any one single discovery, but because in

the general state of knowledge, witch-craft had become something in which it was ridiculous to believe.

Lest we should feel superior to our forefathers because of our emancipation from their ignorance and superstitions, we would do well to picture ourselves as we shall appear three hundred years hence. What will our descendants think of our science, of Christian science, of homeopathy, of our methods of government and education; what of our press; what, especially of our amusements, of our passion for watching people playing games? What will they think of our "movies"—and of golf?

* * *

NOTE.—In the preparation of this paper Dr. W. W. Francis, the Osler Librarian, and the unique collection of which he has charge, have been of the greatest assistance.

Frances Brooke

A Canadian Pioneer

By H. R. MORGAN

WHEN it is remembered that some of the most brilliant Canadian fiction of recent years has been the production of women, it is not the surprise that otherwise it might be, all circumstances considered, to learn that the first Canadian novel, or rather the first novel to have most of its setting in Canada and to have been largely written in Canada, was the work of a woman and one who was regarded as talented in a particularly talented literary age. The novel was "The History of Emily Montague", a typical story of the highly sentimental period of Richardson and his School; the writer, Frances Brooke, a friend and associate of the immortal Johnson, Garrick, Miss Seward and others eminent in the *salons* of a century ago; and the place of its composition, Sillery, then, as now, a suburb of Quebec. Moreover, unread though it would be today save by students of literature and of Canadian history, "Emily Montague" gained popular favour at the time of its appearance and was considered to be one of the "best sellers" of the day.

Since the four small volumes, each of more than two hundred pages, carried readers of "Emily Montague" through her all but interminable adventures (chiefly of the heart), great strides have been made in the printer's art and greater strides, according to modern fancy, in the art of story-telling. The period in which Mrs. Brooke wrote was one of extreme sentimentalism, coupled with floridity of style, in which the world of literature took its cue from Richardson and the first Canadian novel faithfully adhered to type, even to the extent of borrowing the epistolary form that had been affected by the creator of the School. Its writer was not, however, unskilled in letters or lacking in previous association with the book-sellers. The daughter of a parson named Moore and the wife of another, the Reverend John Brooke, D.D., sometime Rector of Colney, Norfolk, she was even before her marriage known as the producer of a weekly literary publication rejoicing in the title of "The Old Maid." She had also published a tragedy entitled "Virginia," a novel, "The History of Lady Julia Mandeville," which ran into at least five editions, and another, "The Letters from Juliet, Lady Catesby, to her friend, Lady Henrietta Campley," which also achieved five editions. It was, therefore, as anything but an unknown or inexperienced tyro that Mrs. Brooke made her bow to Canadian readers and became the pioneer of the Canadian novel; a field into which many members of her sex have since ventured with perhaps, again allowing modern standards to be the judge, a greater degree of success than she attained.

The question will quite naturally follow: How came it that one of the favourites of the English-reading public a matter of one hundred and sixty years ago, a woman so well beloved of the great Dr. Johnson that he is said to have kissed her most affectionately when she took her departure from her Belgravian haunts, should be in Canada, writing of Canada and the Cana-

dians at a time when this country was conceived to be (and actually was) very largely in the possession of the Indians and the *coureurs-du-bois*? The explanation is a simple one. Woman of letters though Mrs. Brooke may have been, she was also, from all evidence, a virtuous and devoted wife, and as such she felt it to be her plain duty, and perhaps her privilege, to accompany her husband into exile from all that mattered to English people in that period, when that gentleman was appointed Chaplain to the Garrison of Quebec in the year 1764. May it not also have been that, after the manner of many of her successors, she welcomed the opportunity thus afforded her of gaining fresh contacts and obtaining a new supply of "local colour" with which to embellish her writings? But whether Mrs. Brooke left London and England, with all that they meant, willingly or unwillingly, whether she looked forward to her sojourn in Canada with concern or with delight, there is abundant evidence in the pages of "Emily Montague" that she enjoyed herself immensely during the four years of her Quebec residence, that she was never lost for an occupation with which to while away her leisure hours and that, whatever the value which the world now places upon her romance as a readable work of literature, she has succeeded in handing down to future generations a most interesting and engaging picture of the Canada that she knew and apparently loved.

It is, indeed, largely in its contemporary description of individuals, scenery and customs that the work has an interest and value for Canadians. When Mrs. Brooke and her husband came to Canada, it is well to remember, this country had been British for a matter of only a few years. Memories of Wolfe, Montcalm and their associates were still fresh and knowledge concerning the interior of the country was exceptionally limited. For the average member of the official population at Montreal and Quebec, Canada consisted only of the valley of the Lower St. Lawrence and the surrounding territory, and it is principally of that part of the country that the novel treats. Strange and wild, yet fascinating and magnificent, did its writer find the scenery. Thus we have the hero, Colonel Rivers (said by some to be identical with Colonel the Hon. Henry Caldwell, Wolfe's Assistant Quartermaster-General and afterwards of Belmont, near Quebec) in his first letter declaring that "every object here is magnificent; the very people seem almost another species, if we compare them with the French from whom they are descended." Soldier-like, he does not, however, fail to observe that "the Canadian ladies have the vivacity of the French with a superior share of beauty" to which he adds the impression that they are "gay, coquet and sprightly, more gallant than sensible, more flattered by the vanity of inspiring passion than capable of feeling it themselves, and like their European countrymen, prefer the outward attentions of unmeaning admiration to the real devotion of the heart." This does not prevent the gallant Colonel from declaring, after having arrived in Montreal upon a visit, that the ladies "seem generally handsome" and have "an air of sprightliness" to such an extent that he vows he "must be acquainted with them all."

That object he appears quite readily to realize; but it is also in Montreal that he meets an English girl, Emily Montague, beside whom "all other women, however lovely, appear marble statues." Unfortunately for the Colonel and for Emily herself, who is equally smitten, the young lady is

given to the public up to that time. Credit for it, however, must be shared with the composer, William Shield, of Covent Garden.

It was thus a woman of no mean literary order who was responsible for the production of the first Canadian novel. It is stated that she was greatly liked by the eminent literary personages of the period, and it was with exceptional regret that the world of letters learned of her death on January 23rd, 1789, several months after that of her more obscure husband. The path which she was the first to explore has since been followed by many of her sex of Canadian birth, but none of their productions, whatever its superiority in plot, composition or conception, is the equal in sheer interest of the book which the wife of the Garrison Chaplain at Quebec penned in her Sillery villa five years after Canada passed into British possession.



Sociological Aspects of Medicine

From an Address before the Men's Canadian Club, Montreal

By

W. W. Chipman

THE profession of Medicine is concerned largely with the intimate and the fundamental things of life, things of which we naturally are rather disinclined to speak. I do not urge you to the opposite extreme, for there is no greater bore on earth than the man, and especially perhaps the woman, who tells us continually of his or her diseases. And yet now and then I think it is wise that we should discuss these fundamental things—the truths that underlie our individual and our social life. Something should be known always of the laws of health and disease, more irrefutable far than the laws of the Medes and Persians. Something should be known, I say, of the laws that govern our own living, and the lives of others; that have governed our fathers before us, and will in turn govern our children.

I stand here today then, a physician in his own country, and I thank you on my own behalf, and on the behalf of the profession which I represent.

I am to speak to you of the Sociological Aspects of Medicine; some of the ways in which our knowledge and experience of life and of death may influence, not only each and every individual but also the social life, the community life, of which we form a part.

No man can live unto himself alone, for his life is expressed always in terms of action, and of inter-action, as *for* or *against* his fellows. Of necessity his world is better or worse because he has lived in it; he, the individual factor in our family, our city, and our national life.

Mr. Dooley told us some years ago that it is not ignorance that so much matters as knowing so many things that ain't so. And Eddie Cantor in "Caught Short" has quite recently told us the same thing. The joke, you remember, was on the doctor. For when the margin-patient ran out of collateral, the cable snapped and he landed in the basement without a shock-absorber. And they sent a margin clerk and two interns to collect the pieces. Ignorance, and knowing so many things that weren't so!

It has been the history of mankind from the very beginning that we learn slowly, at great pains, and through many mistakes. In the long exodus of the human race, from out the night, the blinding night, of ignorance and superstition, these have been the stepping stones of our upward progress, of our evolution. Even today we are still ignorant, and make mistakes; else, what would become of the legal profession? A man's reach is bigger than his grasp, or what's a heaven for!

It is undoubtedly true that the History of Medicine really includes and embraces the whole Story of Mankind. It is really the narrative of man and his struggle to survive, his lasting endeavour to know and to understand himself. This knowledge of self, this understanding of ourselves, mental, moral, and physical, as we arbitrarily divide it, is all closely related to the study of

civilisation; for all conditions of betterment tend to the improvement, the prolongation, of the average human life. And so it may be taken as a universal standard, to measure the *better* or the *worse*. It is with genuine satisfaction that we remember that the average lifetime in our country has risen from 45 to 58.

And now, what have we done in Canada for our Public Health? What have we done, and what are we doing? How do we appreciate and practice of Medicine in its Sociological aspect? It is only in saving ourselves that we may become in any true sense our brother's keeper.

As I have said already, we are doing much. We recall that the earliest recognition of Public Health in Canada was the passage of the Quarantine Act in 1794. Boards of Health were formed in 1832-'34 to combat the cholera. In 1847, 98,000 immigrants entered the country at the Port of Quebec. Typhus fever was rampant among them and 5,424 were buried at Grosse Ile. We were compelled to protect ourselves, and so, in 1849, a Central Board of Health was established. By the terms of Confederation, the care of our Public Health became a Federal responsibility; though the actual work remained, as it still largely remains, with the provinces and municipalities. In 1911, a Canadian Public Health Association was formed under the patronage of the Duke of Connaught and finally in 1919 a Health Ministry, with Dr. John Amyot, C.M.G., as Deputy Minister. Under this ministry was established the Dominion Council of Health, consisting of the chief health officer of each province, together with five members representing Agriculture, Labour and Education.

The Hon. James H. King, M.D., is now Minister of Health for Canada, and his department administers quarantine regulations, the supervision of foods and drugs, patent medicines and narcotics, child welfare, marine hospitals and the medical examination of immigrants, publications on public health, the franking of vital statistics, research laboratory work, and special clinics for the control and treatment of venereal disease.

No small or unimportant work. And correlated with this work may I mention the educational activities of the Canadian Medical Association and the Social Hygiene Council, the excellent service of the Red Cross Society and the Victorian Order of Nurses.

The provinces are not behind hand in this medical endeavour. In Quebec our surplus last year of $4,000,000 is rightly enough spent on our schools, our roads, and our public health. In fact schools are the right road to public health—the health of our children. The Hon. L. A. David, our Provincial Secretary, is an excellent Minister of Health; witness the provincial supply of radium for the treatment of surface cancer, the effective campaign against tuberculosis, and the creation of the rural sanitary units. In his own words, "these units, with their health officer, inspectors, sanitary engineers and nurses, are the greatest step toward the solution of the rural problem." Seventeen counties adhere to this plan and seven more are adopting it, taxing themselves for their own good, their Public Health.

And the cities and the towns—the municipalities—maintain this effort. As you all know, Dr. S. Boucher is the chief Medical Officer of Montreal, the Director of our Health Department. Our improved sanitation, purer water and milk supply, and a lowered death rate, especially among the children,

bespeak his energy and devotion. I quote his figures when I say that the population of the city proper is 762,000 and that last year the death rate per thousand was 13.92, whereas in 1928 it was 14.77. A very creditable showing!

This summarises very shortly what we are doing in a legislative way at Ottawa, Quebec, and in our urban and rural districts. These three Government activities interlock, each implements the others, and they one and all emphasize the need of money and a heightened interest in our Public Health.

In the promotion of this interest, we Canadians gratefully acknowledge the money and the help we have received from the Rockefeller Foundation and Memorial, and recently the gift of $62,500 from the Julius Rosenwald Fund of Chicago to our National Hygiene Committee. Diseases of the mind can be treated as well as those of the body, and as yet we do not send a broken leg to gaol.

And now, what are we doing on our own account, apart from all this legislation? We do not leave everything to George, or even to Georgina. Far from it. Montreal has always been a generous city. We have today some 24 public hospitals, several of them the gift of public-spirited citizens, and there are 92 special charities. We have our Charity Organisation, our Federated Charities, and last year we collected $658,956; which was $19,000 more than our objective. We collected this money and we are spending it. And this has been the tradition of our city since the time of Jeanne Mance.

An organized social service is really a product of our present century, and in general terms it is an attempt to foster and improve our family life; the whole effort is directed toward the children. That the child may "take-off" as it were from his father's shoulders, have a better chance in the keen rivalry of life, may secure as full a return as possible on his inherited sixpence.

Whether we profess it or not, we all, each one of us, are engaged in this social service and the benefit should be a mutual one; a benefit alike to those who give and to those who receive the service. It should be as the famous "quality of mercy . . . that droppeth as the gentle rain from heaven, blessing both him that gives and him that takes."

Again, we are mindful that it is the two extremes in the economic scale that most needs a social reformation. At one extreme there are the poor, they are always with us; and farthest removed from these there are the rich, I mean, of course, the idle and the thoughtless rich. The effort of any social service is to make between these two extremes a better adjustment or a proper balance. Among the poor it is largely a question of a living wage, and having scarcely bread to eat, there is little else in all their lives than the daily struggle to escape starvation. While among the rich, may I say again the idle and the heartless rich, satiety early writes its wrinkles upon the blasé and discontented face. "Blasé and discontented," with the sick and the poor at their very gates! Social Service, if it means anything, if it is to become anything, must bring these two extremes together. The rich and the poor must meet, and in their meeting secure for themselves a mutual salvation. It is indeed a question of Social Medicine.

The sociological aspects of medicine are inextricably interwoven with the many questions of national economics. Even in Canada, what is to be said of some of the conditions found in our city or even in our country life? The

great Industrial problem, the Housing problem, the Slums and the general overcrowding of the city, the standards of living, and the living wage. There is no one in this room today who does not believe he works harder than his neighbour, that he is indeed the hardest worker of the lot; and I have no doubt that it is true. And so, being wage-earners ourselves, we must see to it that we pay, always pay, at least a living wage. Apropos of this, may I quote to you a story of the once famous O. Henry, "An Unfinished Story" as he calls it, the story of the salesgirl, Dulcie, in the city shop. Here you remember he dreamed a dream that when Gabriel blew his horn an angel policeman seized him by the wing. "Do you belong to that bunch?" asked the policeman, pointing to a group of prosperous-looking spirits awaiting judgement. "Who are they?" the dreamer asked. "Why," replied the policeman, "they are the men who hired working-girls and paid them five or six dollars a week to live on. Are you one of the bunch?" "Not on your immortality," the dreamer said. "I am not so bad as that. For in my life I only set fire to an orphan asylum and murdered a blind man for his pennies."

Ruskin rightly tells us that the worth of any civilisation may be measured by what it makes of its girls—its potential mothers. The mother then, and I include, of course, the father, for it takes two to make a bargain even with Maggie and her faithful Jiggs.

Will you forgive the following enunciation?—it is true. Could we but segregate the feeble-minded and eradicate venereal disease, a full half of our social troubles would be cured at the beginning, and this must be done. It will be done when at the long last we call a spade a spade and an ostrich-like complacency is replaced by commonsense.

The sociological aspects of Medicine are a vital concern of our national life. As a practical people, we realize today that we must improve our health, conserve our forests and sell our wheat. And the first of these is even the most important, for in the long run it is the best business.

And all this will prove no sudden achievement, but rather be a matter of slow adjustment. And the first terms of the equation are the health and the education of the children. We must attend to these things.

The world has advanced slowly, at great pains and through many mistakes. The future is but the past entered through another door. And, moreover, we are told that the country where the inhabitants shall not say "I am sick" is exceedingly far off.

BOOKS

*The St. Lawrence Waterway Project**

IN the words of the dedication, this book is an "attempt to disentangle the facts and falsehoods of a great international problem." And the author makes a valiant attempt indeed. From 1713 to the present day, treaties, boundaries and waterways have been important matters to Canada, and now the country is faced with what is perhaps the greatest matter of this kind in its history. It is hard to say how far its settlement rests in the hands of the voter, even though we do live under a representative form of government, but if the electorate is ever called upon to express its wishes it is to such books as this that it will have to turn for information.

It is, therefore, as the source book of the man in the street that Mr. Stephens' volume should be most valuable. Here we have chapters of Canadian history, excellent sketch maps and useful appendices. One of the most interesting of these last is an outline chart of the claims and arguments advanced by the supporters of the project, while another summarizes the arguments of the opposition, so that partizans on both sides can draw ammunition from these pages.

But Mr. Stephens is himself quite definite about the scheme. In his opinion it justifies itself on national and economic grounds as a great adventure for the Canadian people, from which they stand to gain immense benefits. The increase in factories, employment, population, national wealth generally that will almost certainly follow the building of the waterway and the contingent power plants, in the opinion of some experts, fully justify Canada's embarking on the project. But there is another justification in the opinion of the author. The undertaking is essentially international in character. We shall have to co-operate very closely indeed, in spirit as well as fact, with the United States, and that country will share in the profits even more instantly than we shall. The project thus becomes a test of more than our engineering and economic skill. It becomes a test of our international mindedness. Quoting from an article by Sir George Foster, Mr. Stephens draws attention to the change that has taken place in the "methods and facilities of international intercourse." "Economically considered it is a wise policy, to assist and co-operate with sister nations in such a way as to contribute to the fullest development of the diverse resources of each." And this spirit of co-operation, instead of that of domination, must be the basis of the building of the St. Lawrence Waterway.

While in this way he lifts the argument to a higher plane than is perhaps usual, Mr. Stephens is quite alive to the realities of the situation. Certain peculiarities of the American Constitution, for example, undoubtedly make dealings with that country's federal government a precarious business when the sovereign rights of individual states are concerned. "The position," says Mr. Stephens, "is unequal. Canada knows that she has full power to

*The St. Lawrence Waterway Project: by G. W. Stephens. Louis Carrier & Co., New York, Montreal, London. 1930. $6.00.

sign a treaty; the United States appears to be at the mercy of any state which calls her action in question. . . The United States has full jurisdiction over navigation, but it is not yet established that she possesses jurisdiction over water power."

So that however the economists and engineers may pile up figures and extend charts on the movement of wheat and the "mileage of haulage," the ordinary man, interested in what very closely touches the political life of his country, and quite incapable of digesting the mass of facts, will probably follow Mr. Stephens most readily and sympathetically when he is dealing with matters of this kind. His conclusions are founded after all on a conviction for which there is no statistical evidence. He believes that the project is economically sound—this he does base on his study of the figures. But he also believes that it is nationally sound, and this because he believes in the common sense and independence of the Canadian people. If, he says, cooperation with the United States puts us at the mercy of that practical people, it will be due to Canadian stupidity; but he does not believe that Canada will be so stupid. And for this, of course, he has no figures. Nevertheless, as expressed in his book, Mr. Stephens' confidence in the political quality of this country, and his broad view of our international relations with the United States, with particular reference to the St. Lawrence Waterway, are very convincing, even more so than figures. At least one cannot juggle with sincerity.

The book then, is authoritative, we believe, in material, and unquestionably so in motive. From either point of view it should be a valuable companion to everyone interested in this absorbing question. And judging from the number of impressions it has already gone through, the congregation of those interested appears to be very large.

But we must add a word about the volume itself as a piece of book making. There are evidences of carelessness, in names, dates, and titles, etc.: for example, the 1783 treaty of peace is referred to as the Treaty of Paris. But these, or some of them, may be put down to faulty proof-reading. It is in the arrangement and selection of material that it seems to us the book is faulty. The historical section is very prolonged, full of repetition, and exhaustingly detailed in parts, while the copious quotations from the daily press are not in the least convincing. Scattered through the book, in an irregular fashion, are sub-headings from the poets and ancients that seem curiously incongruous at times and do not really add to the readability or authority of the work. A passage from Goethe, for instance, to point the moral of a section on water power, is surely an over-imaginative flight.

The effect of this rather lumbering literariness is two-fold. It overweights the book for the reader and is most distracting: it also send up the price, and six dollars for a book which could be so useful in the formation of an intelligent public opinion on a great public question is not what might be called a popular price, with the reader. It is fair to add these criticisms to what is otherwise an appreciation. For if of the making of book there is no end, even in Canada, of the making of good books in this country there is as yet hardly a beginning. There is not enough attention paid to the style and quality of the writing inside the books. Once the facts are accumulated

and the wrapper chosen in time for the Christmas or Easter or tourist trade, all is well. The effect of the book itself on the imagination and the intelligence of the reader matters not at all.

In justice it must be said that Mr. Stephens has not altogether forgotten the reader. Illustrations, quotations, and a quaint 1629 Dutch map inside the cover, do their best to brighten an otherwise heavy subject. But we cannot help feeling that there is an *embarras de richesse* in these matters.

* * *

Also received: The Doom of Conaire Mor: by W. E. Walsh. Louis Carrier & Co. $3.50. 1929.

* * *

Notes

DURING the month of May last eighteen headmasters of English public schools passed across Canada on a voyage of discovery. Their object was to learn something about Canadian universities and to see what opportunities this country offers to the university trained man, so that when they are consulted in the future by an English boy anxious to come to this country, they may be able to give advice with some knowledge behind it. The tour was an interesting one to observe. It was another step in the education of England in the new subject of Canada, and to those who have a genuine and rational desire to see this country remain what she is so often called, a "sister nation of Great Britain", it was a reassuring spectacle. For however much the headmasters left unsaid here, it was plain that they were in a proper mood of humility throughout the tour, the mood of the learner, and never seemed to show any of that consciousness of things achieved (by one's ancestors) which is so fatal to new ideas. They had evidently posted themselves thoroughly on the differences between Canada and England, and showed no resentment at their existence. On the contrary, they appear generally to have relished the change, and showed very little patience with the graceless "exile," who laments his voluntary banishment to this country.

At the same time the representatives of English Schools were not merely submissive. When the time came, as Dr. Norwood's speech in British Columbia showed, they could keep their end up without effort and without truculence. In other words, they displayed a power of adaptation which should be a model to such of their charges as choose to become Canadians.

That British sentiment in Canada is strong is a patent truism. Yet it is astonishing how much Englishmen themselves can do to weaken it. Every business man, for example, can cite instances of the difficulties he has had in doing business with England, even when he was most anxious to do so, simply or mainly because his English associate refused to come his half of the way. In Canada itself the difficulty develops more interestingly still. The prominent Englishman, often a man of distinction, comes, shall we say, with a general sense of his own importance and, if he is the type, of his own superiority. These are natural. But the sense could be suppressed if they were not

fed so vigorously over here. As the prominent gentleman passes from distinguished hand to distinguished hand, his sense of superiority grows, it does not subside. So that when he makes a speech or gives an interview he appears at his very worst. Instead of filling his proper rôle, a welcome but ignorant visitor, he is allowed, incited, by general acclaim, to take the rôle of oracle: and there is very little true appreciation of the classics and classical methods nowadays.

The headmasters fell into no such trap. They were feted and entertained and given good publicity, as they deserved. But they were also made sufficiently at home to be told a few blunt truths, and that privilege, too rarely accorded the visiting Englishmen perhaps, they seem to have appreciated at its true and high value.

Incidentally the visit of the English headmasters gave Canadians something to think about regarding the teaching profession in this country. When we give the schoolmaster the professional and social standing that belongs to him, when, in fact, it is realized that the men to whom the training of Canadian boys is entrusted, for better or worse, are, in a way comparable to no other, makers of Canadian citizens, we may expect to find men of the calibre of our visitors last May going into educational work in the schools. As we go to press we learn that one of the English Schoolmasters, Dr. W. H. Fyfe, headmaster of Christ's Hospital, has been appointed Principal of Queen's University, Kingston.

* * *

CANADIAN travellers in the United States or Canadians who talk much with American visitors to this country, are struck by the quaint ideas that their otherwise intelligent neighbours often have about this country. Ignorance of geography perhaps is too universal on both sides of the line to be remarkable, though one might expect a passenger on the train running through northern Ontario not to confuse Lake Superior with Lake Michigan; but ignorance of the main principles of our form of government is perhaps more noticeable. It has for one thing had a better press that the accurate details of our geography. After all the struggles of the last hundred years and more for self-government, it is surprising to hear American lawyers and politicians, for example, thinking in terms of the old 18th century empire. They condole with us over the domination of Downing Street and enquire how we are now represented in the Mother of Parliaments. Their history seems to end as well as begin at 1775. There is a large market in the United States it appears for exact knowledge about Canada, and as yet it is not protected by any Act of Congress, and judging from recent magazines, something is being done to exploit the market.

It is equally desirable that Canadians should be well informed on American affairs. The American Letter that follows contains some interesting notes and comment on current events written by an observer of American experience and non-American disposition.

AN AMERICAN LETTER

It is one of the charms of Washington that living in close proximity to Congress one is soon disabused of the idea that foreign affairs are important. Foreign relations, somehow, fall into their true perspective here. To take Canadian-United States relations, for example, there is the small matter of liquor smuggling, clearly a domestic concern—the business of upholding a law peculiar to the United States. Immigration—Congress persistently regards immigration as a purely domestic concern. Tariff—again an affair to be considered solely in relation to internal politics and economy. One begins to perceive that there are no Canadian-American relations. The Saint Lawrence Waterways and the I'm Alone case appear to remain obstinately undomestic, it is true. But the United States coast guard, on the one hand, and the city of Chicago, on the other, have done much to vindicate the orthodox view. One begins to sympathise, here, with those Congressmen and Senators who would abolish the Department of State. Soon the magnificent new Department of Commerce building will be completed. One assumes that tucked away behind it will be found a quiet little annex within which the amateur activities of the State Department may be suitably confined.

However the Canadian public appears to show a praiseworthy and disinterested concern in the domestic affairs of its neighbour to the South. Some remarks on immigration, and liquor smuggling, as they appear from Washington, therefore may be permitted. *The tariff is past praying for.*

. . . . . .

Seen from here, the Liberal government's action in securing legislation to prevent the clearance of liquor shipments to the United States appears laudable but sudden. It seems to reflect a rather rapid shift of view on the part of Canada. Actually, of course, the issue is a long standing one. The American government has repeatedly asked for such legislation, and this leads to a prevalence of the view, in some quarters, that the United States "held a pistol at the head of Canada." This is largely nonsense. The celebrated army of prohibition ironsides which was to infest the Canadian border, if Mackenzie King did not surrender, was visionary. Upon examination, the Ten Thousand dwindled. Their only effect could have been to delay the legislation, since no Canadian government could have afforded to strike friendly attitudes under fire. Another view of the legislation exaggerates the part, in securing it, played by the Canadian Churches, and the American Churches acting through them. As a Canadian has remarked, the Manitoba Free Press has not yet become solely a Church organ.

The notion that it is to Canada's own interest—decency apart—to discourage the bootlegging element, is not prevalent here. Yet a moment's reflection upon the condition of Chicago, where those elements enjoy the power that comes from wealth, will show that self-interest in this case may march with altruism. Incidentally, Washington notes with interest how Mr Mackenzie King feels that a sincere attempt is now being made to enforce prohibition in the United States. That is exactly the experience of the capital itself. The implied criticism on previous American administrations is appreciated.

Canadian immigration to the United States came to the fore again lately with the presentation of the Johnson Bill in the House and the passing of the Harris bill by the Senate. Unlike that in the Senate, the House bill proposed a quota for Canada as well as for Latin America. The suggested quota, however, some 67,000 odd, seems large enough to take care of southward immigration at present levels.

It may be said at once that the entire impetus behind these bills is the desire to keep out the Mexicans. Canada and Latin America are to be thrown in for the sake of the principle, and to save Mexico's face. Anyone who knows the Southwestern States will agree that the Mexican invasion has assumed large proportions in the last decade. But even before that the peons were coming in increasing droves. The 1900 federal census showed 103,393 *foreign born* Mexicans here, that of 1910 showed 219,802, and the last one in 1920 revealed 478,383. Mexican immigration, in fact, was doubling in numbers every 10 years, even before the real movement began. Census figures are necessarily inadequate. It is believed that the 1930 count will disclose about a million Mexicans here. Enthusiasts for restriction assert that two million is a truer estimate. Canadians will no doubt take a sympathetic view of the American problem.

Restriction of this immigration is opposed by the railroads, the big cotton planters of Texas, the fruit growers of the Imperial Valley, and in fact all who welcome cheap labour. On the other hand the State Department, and business concerns trading with Latin America, oppose it. They do not want to sir up resentment below the Rio Grande.

The Department of Labour, as usual, is found squarely behind the American Federation of Labour. For a time the A. F. of L. tried to prevent immigration by a "gentlemen's agreement" with its Mexican equivalent, the Krom. With all good faith the Krom was powerless to dam the flood at the source. Two years ago, therefore, the A. F. of L. abandoned its agreement and resorted to legislative efforts. Labour is now backing the Johnson Bill. It is at th instance of the Federation that a quota is to be applied to Canada, so that the charge of discrimination against Mexico may be avoided.

After reversing itself a number of times, and at one time insisting upon applying a quota to Canada, the Senate finally passed the Harris bill with an amendment limiting the restrictions to Mexico. The House is unlikely to accept it in that form. Opinion in the country, however, is mounting and will eventually force the passage of some such bill, with or without application to Canada.

The interesting thing is that, even according to advocates of restriction, a great percentage of Mexicans have entered illegally. Many of them do not relish paying eight dollars head tax, ten dollars for a visa, and three dollars for medical examination. They, therefore, save their twenty dollars, or about a hundred dollars for a family, by the expedient of wading or swimming across the Rio Grande. New arrivals in the Southwest are hence called "wet-backs." It is obvious that either bill, if it were to become a law, would have to be followed up with much severer methods of enforcement. A good many authorities feel that the only solution lies in registration of aliens. But the proponents of the Johnson bill soft pedal this. They do not want to arouse liberal and radical opposition yet. It is wiser to cross bridges one at a time.

J. B.

THEY FLY THEIR KITES

Warm sun and cooling breeze
This Sunday in the park
Where coloured kites fly high
Above the open spaces,
Ducks and long-tailed dragons,
Serpents, fish and rabbits
Straining at the leash.

On knee in bright green grass,
Absorbed, a woman, man
And boy prepare their monster
Toy, while baby girl
Left to her own devices
Trips on her ball and cries
Unnoticed. How should
They hear? They fly their kite.

It rises, falls and drags,
Rises again, flies free
And far, a living, scarlet
Bird, high in the air,
'Till caught by wind, it's torn
From tethering cord and borne
Far out of sight. Forlorn,
The woman, man and child
Watch others fly their kites.

FRANCES R. ANGUS.

THE BLIND FIDDLER

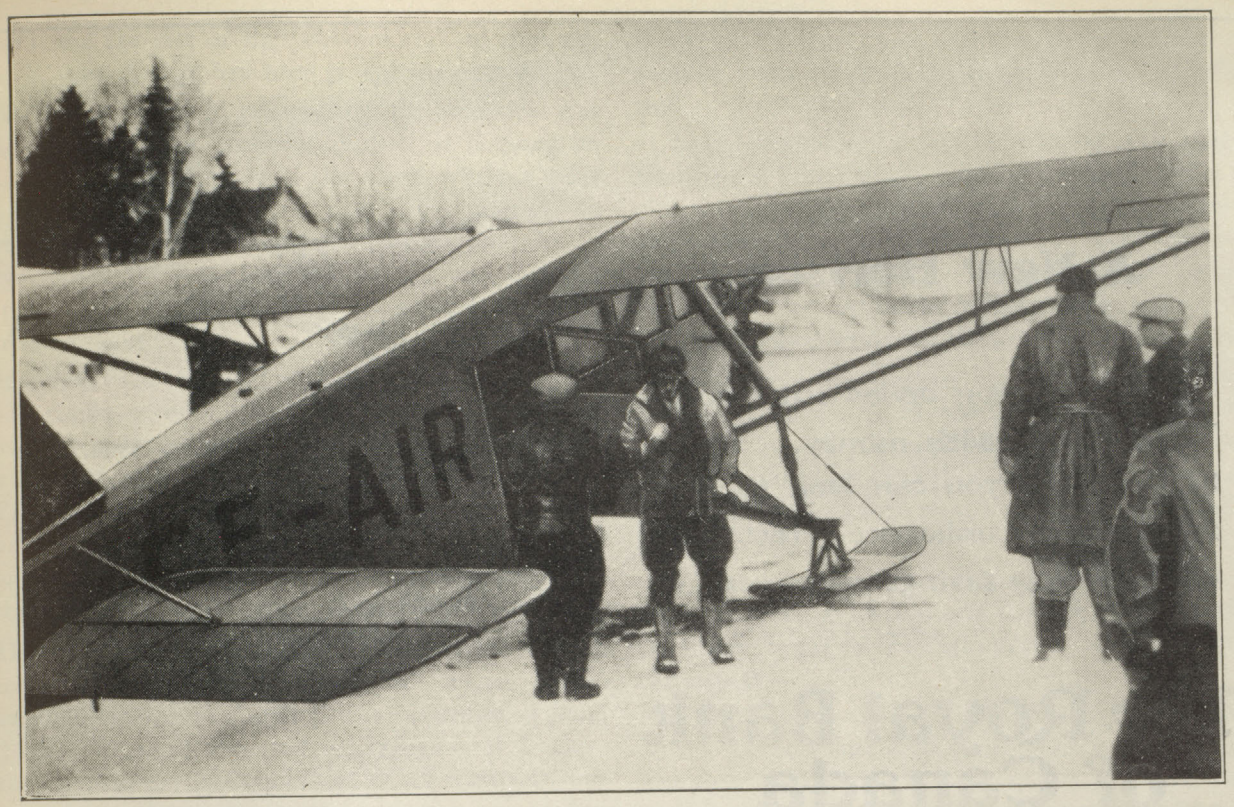
Sure, I have lived full many a year,
And trudged full many a mile;
Through all the countryside I've gone
With my fiddle and my smile.
There's scanty pence within my pouch;
My shoon ha' many a hole;
But I thank the Little People
Who put music in my soul.

These twenty springs my ol' woman
Has lain beneath the sod.
(Mary-Mother tend her soul,
Ha' mercy on her God!)
Ah, blithely fared we through the land
When we and the world were young,
And "blind eyes" learnt through hers, the songs
My fiddle since has sung.

So now I trudge by the winding road,
And over the moor and away,—
Through the smell of the broom and the sodden peat,
To the tang of the salt sea spray.
I whistle the calls of the mating birds
When morn peeps over the hill,
But my fiddle sobs for the soul of me
When night is eerie still.

'Tis I that would ask of the Fairie Folk,
The People little and kind,
To guide me onward across the world
With the song of the glad sea-wind.
And when on the last lone trail I pass,
And stand with my face to the West,
May I fiddle my way through the golden gates
To the woman my heart loves best.

STELLA M. BAINBRIDGE.



READY FOR THE FLIGHT TO MISTASSINI.
Note the skiis used on the plane for winter travel.

One Winter Day

By WILFRID BOVEY

WHEN we were very young we possessed—or our parents did—a large atlas, almost as large as ourselves—and one of our favourite employments was looking at maps and wondering what the places on them were really like. The northern regions of Canada were mostly blank. There were plenty of empty spaces where the imaginative scribe of Jacques Cartier's story might have put his one-legged men and his people who never ate but only drank. Up in "Rupert's Land," on the latitude of James Bay was a huge lake, Grand Lac Mistassini it was called. The shores were shown in dotted lines, intriguing dotted lines, which meant that no one really knew where they ought to be. Grand Lac Mistassini stirred our youthful imagination. Here, quite close to our home, was unexplored country, full of bears and Indians, waiting for someone to make new maps of it. But how were we to get to Grand Lac Mistassini? We never solved the problem—then we grew up and went to universities and law courts and a war, and forgot all about it.

The last few years have seen Canada stretching northward. In the west the Yukon was opened up; then came the Canadian Northern Railway and other lines across the prairies; then the Edmonton Dunvegan and B.C. Railway, to the Peace River; and the Alberta Great Waterways to the Clearwater. Now we have the Hudson's Bay line, and we are building elevators at Churchill.

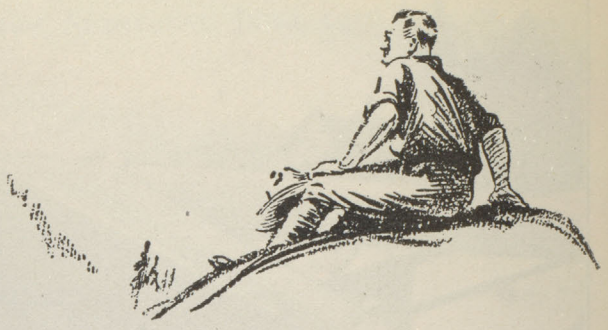
In the east, the Quebec and Lake St. John Railway linked us to old but scarcely known settlements. It was a pleasant trip to take the train to Roberval and Chicoutimi and come down the Saguenay by boat. Word began to go about, too, that there were minerals somewhere in the back country.

Then Louis Hémon wrote Maria Chapdelaine, and the Duke-Price Power Company built at Ile Maligne.

Louis Hémon told us much about our own province and our own people. It is well that he did, for the Quebec of Maria Chapdelaine has passed into history. Maria—the real Maria—looks out of her window on the Peribonka to see her young friends pass in their motor cars, and a new railway runs by her home.

The building of the new power house and the consequent damming of Lake St. John were objected to by the

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$1,000 in 3 years—costs $956.28 in weekly payments of $6.13.

$1,000 in 2 years—costs $970.32 in weekly payments of $9.33.

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farmers, and the rest of the province real sed that the Lake St. John district had been prospering exceedingly.

At the same time, prospecting for minerals was going on all through northern Quebec. It is going on continuously now, and one of the places where a great deal of work has been done is Lake Chibougamau. In some places luck has attended the seekers, as it did in Rouyn, elsewhere they are still tapping and drilling; but no one now doubts that there are great riches in the Laurentian rocks.

It seemed to be in accord with our policy of popularising Canadian economic and historical geography to provide some information about some of these new developments, and we were fortunate in obtaining the ready co-operation of the Honourable Honoré Mercier, Minister of Lands and Forests. It was decided to make a winter trip by air to Lake Chibougamau and Lake Mistassini and to take a camera man and his machine.

On the evening of March 7th we set out from Moreau Street Station, Montreal, bound for St. Felicien on the Chamouchouan River, a little to the northwest of Lake St. John. The party consisted of Captain T. H. Finney, of the Curtiss-Reid Airways, Mr. W. H. Graham, our camera man, and myself. Our first surprise was to find the train full. Priests, young and old, a couple of engineers, a few cheerful farmers—one with his wife, and a small and friendly child called Nini with three pretty aunts provided a fair load for our pullman. This was our first indication of the growing population in the north country, and though some of our travellers detrained at Joliette and Shawinigan Falls, there was a respectable contingent left over till next morning. At 5.40 a.m., finding ourselves at Chambord Junction, a few miles south-west of Lake St. John, we took a leisurely accommodation train, which ambled up the west shore of the lake combining way-freight and passenger duties, and arrived at the Château St. Felicien in time for breakfast.

It was no morning for a flight. The distant hills where Lake Chibougamau lay were covered in clouds, so we spent our time looking about the town.

St. Felicien has an enormous church—which seemed none too large for the congregation next day,—a convent, a boys' school, and a town-hall with two towers. It must be a pretty place in summer, for the street is lined with trees and a hundred yards or so from its north side flows the Chamouchouan River, half a mile wide. When we saw it, of course, the river was a white expanse of snow-covered ice. We visited a factory where little wooden boxes used for berries are made by the carload; discovered that nearly every house had a radio set; and found a shop window displaying the most modern helps for the housekeeper, beside a yellow spinning-wheel. The one-dog sleigh is still a common conveyance for boys or men, but the motor is making inroads on its popularity. There is a sawmill, as well as the box factory, and four fox farms. One way or another, everyone in the place seems to be doing fairly well.

In the afternoon the weather was still bad. Captain Sterling and Pete Vachon, pilots of the two b g Travelair planes which ferry prospectors and freight around the north country, were not optimistic. So giving up any idea of a flight that day, we spent the afternoon in the comfortable clubhouse, which stands on a hundred-foot bank overlooking the Curtiss-Reid landing ground.

On Sunday the weather continued to be doubtful. We made a short flight and saw that the hills were blanketed by a deep layer of mist. It was not long before we were bumping through a smother of wispy snow clouds, driven on a high west wind—and that ended our trip for Sunday.

On Monday, at last, came a clear day. The thermometer stood at 28 deg. and the hot sun was melting the snow in the St. Felicien streets, so off we set for the airport.

Vachon went first—he was on his way to a far northern lake where some prospectors were wait ng for him to bring them in. He was landing for the first night at Lake Mistassini and we agreed to meet at 3.30 for a cup of tea at Cooper's Camp. This is at the head of the Rupert River, which flows westward from Mistassini to James Bay—it would have sounded odd a few years ago. A.I.B., the plane in which we were going, had to make another trip before ours. Major Armitage and a party of woodsmen were on their way to a lake up the Rat River. He and I stood for a minute on the edge of the steep bank watching the preparations and discovered that the last time we had been side by side had been during the Battle of Amiens, when he was in the 8th Army Brigade, C.F.A. Captain Sterling told us to expect the 'plane back at 11.30. At 11.28 we heard the roar of the big engine. In two minutes more, with astonishing accuracy—he drives her like a motor car—Sterling had brought the skis of A.I.B. up on the wooden blocks which keep them from sticking in the snow when the machine is stationary. We loaded ourse ves in and looked over the contents of the cabin. Snowshoes for everyone, blue glasses, emergency rations, sleeping bags, and a gasoline torch (very necessary precautions when you may have to spend the night on a lake in sub.-zero weather), maps, and cameras. All right! "Contact!"—and we climbed in a wide circle over the town. Sterling was piloting, with Finney beside him in the other dual control seat. Bill Williams, the engineer, sat on the floor behind them and composed himself to sleep. The cabin was warm as a house.

For a few minutes we flew over the farming country, the black clumps of trees standing out in startling contrast to the snow-covered fields. We were following the Chamouchouan River towards the hills, flying at about 4,000 feet, and we could identify every bend and island

(Continued on page 32)

DAWES

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The Genuine Old Ale



Over 100 Years Experience back of each bottle!

Personals

The *News* is glad to receive from graduates of the University information for inclusion in these columns. Press clippings and memoranda of a personal nature will be welcomed by H. R. Morgan, Esq., c/o The Recorder Printing Co., Brockville, Ontario; or by the Executive Secretary, Graduates' Society, McGill University, Montreal.



W. H. HOWARD (Sci. '83)
Mr. Howard's death, which occurred at Salt Lake City, Utah, on January 26th of this year, deprived McGill of a graduate whose work in metallurgy has for many years reflected to the great credit of his University.

Tribute to P. D. Ross (Sci. '78), of Ottawa, was paid recently by an editorial in Toronto *Saturday Night*, which said, in part, "It is the men of character and complete experience like Mr. Ross who have made journalism the highly respected calling that it is in Canada today."

Dr. A. G. Morphy (Med. '90) has established a sanitarium for nervous cases at Lovat Hall, Lancaster, Ontario.

George S. Currie (Arts '11), President of the Graduates' Society of McGill University, has been elected President of the Canadian Club of Montreal, succeeding J. Colin Kemp (Sci. '08), who held the post for the season of 1929-'30.

Lieut.-Col. Robert Starke, a Governor of the University and wartime Commander of the McGill Contingent, Canadian Officers' Training Corps, has been named Honorary Lieutenant-Colonel of the 3rd Regiment, Victoria Rifles of Canada. The Honorary Colonel of the regiment is Field Marshal His Royal Highness the Duke of Connaught.

Kenneth W. Spence (Arts '29) has been appointed Research Assistant in Psychology at Yale University, and Miss Ida Greaves (Arts '29) has been awarded the Whitney Fellowship at Radcliffe College, Harvard University.

Dr. E. Ellice McDonald (Med. '01) appeared recently before a special committee of the Senate of the United States of America studying measures for the control of cancer. As Chairman of the DuPont Cancer Research Foundation at the University of Pennsylvania, Dr. McDonald stated that cancer had increased 62 per cent in the past quarter century and urged the American Government to contribute generously to funds for the purchase of radium and for other methods of combatting the disease.

Dr. Basil C. MacLean (Med. '27) has left the staff of the Montreal General Hospital to become Superintendent of Touro Infirmary, New Orleans, La. He is an officer of the Montreal Branch of the Graduates' Society and has recently represented the Society on the Advisory Board of the Students' Council.

Damages of $35,000 were awarded recently by a jury in New York City to Dr. Charles E. Cameron, M.R.C.S. (Med. '83), who, more than two years ago, suffered a broken thigh as the result of a fall on East Sixty-sixth Street, New York. Physicians testified that Dr. Cameron might never recover fully the use of his injured leg.

Noel I. Chipman (Sci. '20) is the architect for the premises and new galleries which the old-established firm of W. Scott & Sons, art dealers, are opening on Drummond Street, Montreal.

The Canadian International Paper Co. announced in April the appointment of F. Gerald Robinson (Arts '05) as Vice-President, in charge of sales of sulphite.

E. P. Fetherstonhaugh (Sci. '99), Dean of the Science Faculty of the University of Manitoba and Professor of Electrical Engineering, has been appointed chairman of a board to adjudicate on claims made by the City of Winnipeg against the Winnipeg Electric Company for electrolytic damage done to the city's mains.

Dr. H. A. DesBrisay, Med. '17, Holmes Medalist, is returning to Vancouver after an absence of over ten years, during which he took post-graduate work in Chicago, served on the staff of the Mayo Clinic for two years, spent three years in Toronto at the Lockwood Clinic, and the past five years as Internist in Hanover, New Hampshire, and Assistant Professor of Medicine at the Dartmouth Medical School. He will confine his work to Internal Medicine. Dr. DesBrisay served overseas with the 6th Canadian Field Ambulance and No. 3 Canadian General Hospital (McGill).

At the election for officers of the Montreal Bar held on May 1st, Geo. A. Campbell, K.C., of the Law Class of 1901, was elected Batonnier for the current year.

Lou Anderson, Arts '23, is on furlough from his mission in the Camerouns, Africa; Willis Ginn, Arts '23, is teaching at the Protestant School at Pointe aux Trembles, and Clarence McGerrigle, Arts '23, is with the Notre Dame de Grace branch of the Y.M.C.A. in Montreal.

(*Continued on page 29*)

144 Years of Quality

MOLSON'S BREWERY is the oldest in Canada, and the second oldest on the North American continent.

Since its establishment in 1786, Molson's Brewery has been noted for the standard of quality maintained in brewing fine Ale.

And after 144 years, Molson's Ale is still the most popular bottled Ale sold in Montreal.

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Notes

In the past year, 332 lectures were given under the auspices of the McGill Department of Extra-Mural Relations, also 21 radio lectures, seven plays, and four concerts. Approximately 22,530 people attended the gross attendance, including a series of Board of Trade lectures, totalling approximately 60,000.

In March the McGill Debating Union Society celebrated the 50th year of its existence, the occasion being marked by a notable gathering of more than 300 guests in the Union Ballroom. His Excellency the Governor-General was present and accepted from P. F. Foran, President of the Union, honorary membership in the Society. The Right Honourable James Ramsay MacDonald, Prime Minister of the United Kingdom of Great Britain and Northern Ireland, is the only other holder of this distinction, having accepted honorary membership on the occasion of his visit to the University in the autumn of 1929.

Dr. G. W. Parmelee (LL.D. '11) has resigned his position as Director of Protestant Education in the Council of Public Instruction of the Province of Quebec and has been succeeded by Dr. W. P. Percival (Arts '12), recently Professor of Education at the State Normal School of Pennsylvania.

In the month of February, six public lectures on Greek authors were delivered in the Arts Building, three by Professor W. D. Woodhead and three by Professor C. W. Stanley, the former lecturing on Homer, Plato, and Lucian and the latter on Herodotus, Thucydides, and Demosthenes. The course was well attended and much appreciated by undergraduates of the University and by the public.

Circulation of books at the University Library has increased 280% in ten years and the number of readers from 30,000 to 50,000 in the same period. An account of the remarkable growth of the Library and some details of the splendid work it accomplishes will appear in the September number of the *News*.

Under the direction of Dr. G. R. Lomer, University Librarian, an exhibit of silhouette art by the Florentine sculptor, Signor Ugo Mochi, was presented at McGill in April. So far as is known, the occasion was the first on which a major exhibition of such work had been presented to the public in Canada.

A feature of the Budget presented by the Hon. Charles A. Dunning in the House of Commons on May 1st was the clause exempting from income tax donations to churches, hospitals, and educational institutions. Interviewed by the Montreal *Gazette*, Sir Arthur Currie remarked that the measure would undoubtedly meet with widespread approval, recognizing as it did the vital part taken by such institutions in promoting the moral and physical welfare of all citizens in the Dominion.

Dr. A. L. T. Moesveld, after studying ice engineering at McGill under Dr. Howard T. Barnes, has returned to assume duties at the University of Utrecht, Holland. On leaving Montreal, he expressed deep appreciation of the work being accomplished at McGill and stated that, if circumstances would permit, he would return next year to extend the range of valuable knowledge which had accrued to him through this year's experience.

The Government of Soviet Russia cabled Dr. Howard Barnes in April for advice in regard to the removal from the Svir River of an ice jam which was threatening destruction of a great hydro-electric power plant some distance from Leningrad. Engineers of the Russian Government learned of Dr. Barnes's work in ice engineering through an article published in the *Scientific Monthly* and in the March number of the *McGill News*.

Stirring events in the making of Canadian history are recalled by the presentation to the McCord National Museum at McGill of a painting showing the burning of the Parliament Buildings at Montreal on April 20th, 1849. The name of the artist is unknown to Dr. W. D. Lighthall, who made a gift of the picture to McGill.

Dr. R. Tait McKenzie (Arts '89, Med. '92, LL.D. '21) has presented to the McCord National Museum a statuette of General Wolfe, a replica of the statue of his design to be unveiled this month in Greenwich Park, London.

Professor William Caldwell, Macdonald Professor of Moral Philosophy, has been informed by the Consul-General of France that the Government of the French Republic has conferred upon him the decoration of Officer of Public Instruction.

The Royal Society of Canada announced in April that this year's Flavelle Medal for conspicuous achievement in Science had been awarded to Dr. A. B. Macallum, Emeritus Professor of Bio-Chemistry; and that the Lorne Pierce Medal for work of conspicuous merit in Canadian literature had been awarded to Sir Andrew Macphail, Professor of the History of Medicine.

In July and August a summer session of the McGill University Library School will be held, under the direction of Mrs. Mary Duncan Carter and Miss Grace E. Reynolds, of McGill, at the University of British Columbia. The session will be under the patronage of Sir Arthur Currie, L. S. Klinck, President of the University of British Columbia, Dr. G. R. Lomer, McGill University Librarian, and John Riddington, librarian at U. B. C.

Professor C. M. McKergow, of the Faculty of Applied Science, and F. T. H. Bacon, President of the New York Branch of the Graduates' Society, represented the University in April at a gathering in New York City to mark the 50th anniversary of the founding of the American Society of Mechanical Engineers.

The London to Canterbury road, one of the most famous highways in literature and history, was the subject of an address delivered by Dr. G. R. Lomer to members of the McGill University Library Alumnæ on the evening of May 5th.

Psychology, Normal and Abnormal, is the title of a book by Dr. J. W. Bridges (Arts '11), Professor of Abnormal Psychology, published recently by Messrs. D. Appleton and Co., of New York and London. Reviewing the book, the *Montreal Star* says, in part, "Impartiality seems to have been the keynote, the true philosophic viewpoint is rigidly preserved." The book, dedicated to Dr. C. F. Martin, Dean of the Faculty of Medicine, has attracted widespread attention and seems destined to follow the example of the author's *Outline of Psychology*, the third edition of which came off the presses in 1925.

At the annual meeting of the Acoustical Society of America, held in New York in May, H. E. Reilley, M.Sc., Associate Professor of Physics, was made a Fellow of the Association in recognition of his work in the acoustical field.

Under the will of the late Mrs. Madeleine L. Ottmann, of New York City, $50,000 is bequeathed to Dr. Wilder G. Penfield, head of the Department of Neurological Surgery at McGill, for neurological research. Mrs. Ottmann, whose previous donation of $35,000 was recorded in the *News* some months ago, made her generous gift and bequest in appreciation of professional services rendered by Dr. Penfield to a member of her family.

(*Continued on page 36*)

Fortieth Anniversary of the Ottawa Valley Branch

(From the Ottawa *Evening Journal*, April 24th, 1930)

"The Ottawa Valley Graduates' Society of McGill University celebrated last night the 40th anniversary of its formation with a delightful dinner and dance in the Chateau Laurier with Sir Arthur W. Currie, G.C.M.G., K.C.B., LL.D., principal and vice-chancellor of the University, as guest of honour and chief speaker.

"Sir Arthur was accompanied by Lady Currie and they, with G. Gordon Gale, president of the Society, and Mrs. Gale, received the guests who numbered about 200.

"The dinner was held in the spacious new banquet hall adjoining the grand ballroom and the company went to the latter for the dancing which continued until a late hour. The Society had the honour of being the first to hold a function in the new banquet hall, which is the old main dining room remodelled and beautified considerably.

To "Old McGill"

"The toast to 'Old McGill' was admirably proposed by Dr. H. M. Tory, F.R.S.C., F.R.H.S., a graduate of the University and now president of the National Research Council of Canada. Sir Arthur Currie responded, and in a comprehensive survey showed what McGill had achieved in recent years, some of the changes which had been and were being effected, and at the close emphasized what the graduates of Canada's universities owed to the Dominion in the way of developing a fine spirit of service and fair play.

"The toast to 'Sister Universities' was proposed by The Hon. Thibaudeau Rinfret, one of the judges of the Supreme Court of Canada, a former graduate of McGill University and for some years a lecturer there in Law. The toast was responded to by Charles G. Gowan for Toronto University, and G. C. Monture for Queen's University, Kingston.

"P. D. Ross, honorary president of the Society, at the request of the chairman expressed the thanks of the gathering to Sir Arthur Currie for his address and took opportunity to congratulate Sir Arthur on his return to his old vigour after his serious illness.

"Dr. George S. McCarthy, one of the representatives of the Society to the Graduates' Council, also occupied a seat at the head table, along with those named, most of whom were accompanied by their wives.

"The president, G. Gordon Gale, in opening the programme of speeches following the dinner, after the toast to The King had been suitably honoured, spoke of the pleasure it was to the former McGill students to welcome Sir Arthur and Lady Currie. Mr. Gale recalled that Sir John A. Macdonald was honorary president of the Society at its formation. Dr. H. M. Ami of Ottawa was secretary. The president said the latter had sent his regrets at being unable to attend the function.

"Introducing Dr. Tory, the president recalled also that it was to the doctor he went as a new arrival at McGill to take his worries, and from him he had received much help.

"Dr. Tory said he recognized many old faces in the company. He remarked on some criticisms that, he said, were being voiced with regard to educational institutions generally, and declared: 'I think we have reason to be proud of our educational institutions in Canada'. At no time had there been more reason for this pride than the present, he added. In all these institutions traditions were growing up that were worthy, he said. He complimented McGill on being an independent institution, as the result of the generosity of a certain merchant.

" 'I think it is a magnificent thing that there should be one great institution in this country which calls forth the generosity of its citizens,' said Dr. Tory. The speaker declared he thought himself justified in saying: 'There is a McGill spirit, something that is distinctive and of quality.'

"The committee in charge of the arrangements for the splendid function comprised G. H. McCallum, chairman; Dr. J. Fenton Argue, Dr. F. W. C. Mohr, Dr. C. H. Brown, E. B. Jost, Mrs. J. E. Craig, G. Harold Burland, Dr. A. P. Davies, Colonel A. F. Duguid, R. C. Berry, C. R. Westland, Mrs. G. Gordon Gale, L. H. Cole, R. E. Hayes, Dr. T. H. Leggett, Miss Jean Matheson, V. M. Meek, Dr. D. M. Robertson, Dr. G. M. Geldert, Percy D. Wilson and Mrs. W. R. McClelland.

* * *

The Ottawa Valley Branch

LIST OF OFFICERS
1930

Honorary President	P. D. Ross.
Honorary Vice-President	Dr. H. M. Ami.
	Dr. J. F. Argue.
	Dr. H. M. Tory.
President	Mr. G. Gordon Gale.
First Vice-President	R. C. Berry.
Second Vice-President	P. D. Wilson.
Third Vice-President	Col. A. F. Duguid.
Fourth Vice-President	Dr. T. H. Leggett.
Honorary Secretary-Treasurer	R. C. Hayes.
Honorary Assistant Secretary	Miss Jean Matheson.
Executive Committee	V. M. Meek.
	G. H. McCallum.
	Dr. G. M. Geldert.
	Mrs. W. R. McClelland.
	G. H. Burland.
Representatives to Graduates' Council	Dr. Geo. S. MacCarthy.
	K. M. Cameron.

Personals

(*Continued from page 25*)

Rev. J. M. McCurlie, past student, who has been pastor of St. Andrew's Presbyterian Church, Parry Sound, Ont., has accepted a call to North Bay, Ont.

Donald Ross-Ross, Sci. '17, has been elected Vice-President of the Engineers' Club of Cornwall, Ont.

D. F. Cooper, Sci. '25, has been appointed district mining inspector at Sudbury, Ont., for the International Nickel Company. He has had extensive experience in mining in Canada and Spain and latterly has been a "shift boss" at the Frood Mine, near Sudbury.

Rev. Joseph Cordner, past student, has become minister of Clifton Street Presbyterian Church, Belfast, Ireland. His most recent charge was that of the Presbyterian Church, Sherbrooke, Que.

In return for services rendered to Finnish immigrants at the Montreal General Hospital, Dr. H. E. MacDermot, Med. '13, has been awarded the Knight's Cross of the Order of the White Rose of Finland.

L. C. McOuat, Agr. '15, has been appointed General Agricultural Agent of the Canadian Pacific Railway, with headquarters in Montreal. For some years past he has been attached to the staff of the Federal Department of Agriculture, with headquarters in Ottawa.

A Fellowship of the Royal Architectural Institute of Canada has been awarded to J. Cecil McDougall, Sci. '09, Arch. '10, of Montreal.

George E. Cole, Arts '02, Sci. '06, recently Chief Inspector of Mines for the Province of Manitoba, has been appointed Provincial Director of Mines and head of the new department that will control the province's mineral resources.

Rev. M. W. Goodrich, Arts '14, of Belmont, Ont., received the degree of Doctor of Theology at the annual convention of the United Theological Colleges, Montreal.

Eldon M. Taylor, Agr. '18, has resigned as assistant superintendent of the Dominion Experimental Station at Fredericton, N.B., to take charge of the field work of the oils and crops division of the New Brunswick Provincial Department of Agriculture.

Rev. Dr. F. Scott Mackenzie, Arts '14, principal of the Montreal Presbyterian College, represented the Presbyterian Church in Canada at the general assemblies of the Presbyterian Churches of Scotland, England, Wales, and Ireland.

Edward A. D. Morgan, Law '82, has been chosen Conservative candidate in the Carleton, Quebec, riding for the next Dominion general election.

R. A. C. Henry, Arts '12, Sci. '12, has resigned as Deputy Minister of Railways and Canals at Ottawa to become Vice-President and General Manager of the Beauharnois Power Corporation.

R. Ruggles Gates, Arts '06, professor of Botany at the University of London, is the author of a new book, "Heredity in Man," which has been well received both in Great Britain and on this continent.

The Hon. Narcisse Perodeau, M.L.C., Law '76, celebrated his 79th birthday on March 26th, and received numerous congratulations from associates in parliamentary circles at Quebec.

(*Continued on page 30*)

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Head Master

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National Research Council Scholarships

McGILL RECEIVES 21 AWARDS OUT OF 65 GIVEN IN CANADA

McGill and Macdonald students gained 21 of the 65 scholarships offered annually by the National Research Council, tenable for the following year in a Canadian University, it was announced in April at Ottawa.

Three classes of post-graduate scholarships are awarded, known as bursaries, studentships, and fellowships, having an annual value of $750, $1,000, and $1,200 respectively.

In the McGill group, the Department of Chemistry ranked first in number of students obtaining awards, 11 men being granted prizes. Physics students obtained seven of the awards, and bacteriological, geological, and biological, each one.

In chemistry D. L. P. Cooper received a fellowship; J. S. Allen, N. H. Grace, E. P. Linton, F. R. Morehouse, S. Z. Perry, H. S. Sutherland, H. R. Wright, studentships; and W. E. Barker, J. Barsha, and A. F. Gallaugher, bursaries.

In physics L. T. Howlett received a fellowship; G. V. Helwig was granted a studentship, and the following students were awarded bursaries; R. G. Hunter, J. Katzman, W. B. Ross, and J. C. Tobin.

J. T. Williamson received a bursary in geology; N. H. McMaster received a bursary in biology, and H. L. Tarr received a studentship in chemistry and bacteriology.

* * *

Personals

(Continued from page 29)

JOHN HUTCHESON, Arts '23, is engaged in notarial work in Montreal, after residing for some time in Detroit, and DAVID COWAN, Arts '23, after three years with Otis & Co., New York and Cleveland, has become associated with McDougall & Cowans, Montreal.

CLARENCE FRASER, Arts '23, has been transferred to Ottawa, and BERT BISHOP, Arts '23, to Toronto, by the Bell Telephone Company.

CAMPBELL WADSWORTH, Arts '23, has accepted a call to a United Church in Saint John, N.B.; NORMAN EGERTON, Arts '23, is rector of the Anglican Church at Waterloo, P.Q.; KEITH OWEN, Arts '23, is associated with Jones Heward & Co., Montreal, and FELIX WALTER, Arts '23, is teaching modern languages at Queen's University.

Members of the Arts Class of 1923 recently married include ANGUS OGILVY, WALLACE WILLARD and RALPH COLLINS.

J. G. GLASSCO, M.Sc., Sci. '00, manager of the Winnipeg Hydro-Electric System, is a delegate to the World Power Conference in Berlin.

COLONEL HUGH A. CHISHOLM, Med. '05, has been appointed Port Physician at Halifax, N.S., following his return from England, where he was in charge of the medical section of the Dominion Immigration Service in London.

S. W. Fairweather, Sci. '16, has been appointed Director of the Bureau of Economics of the Canadian National Railways, with headquarters in Montreal. He has been associated with the staff of the Bureau since 1923, latterly as Assistant Director.

Erskine Buchanan, Law '21, has been elected president of the Junior Bar Association of Montreal.

The Hon. E. Fabre Surveyer, Law '96, has been elected a Fellow of the Royal Society of Canada.

W. H. Biggar, Arts '20, Law '21, has been re-elected by acclamation to the Montreal City Council representing Notre Dame de Grace ward; and Dr. F. W. Gilday, Med. '97, has been elected by acclamation as the member of the same body representing St. Andrew's ward.

Rev. Gordon N. Maxwell, past student, has resigned as pastor of the United Church at Merrickville, Ont., to become port chaplain for that church at Quebec.

Marechal Nantel, K.C., Law '12, has been appointed a member of the Historic Sites and Monuments Board of Canada. He is law librarian at Montreal.

F. E. Bronson, Sci. '09, has been elected president of the Canadian Club of Ottawa.

* * *

Lost Addresses

Correspondence addressed to the following has been returned. Will anyone with knowledge of the present address of those listed below please notify the Executive Secretary, Graduates' Society, McGill University, Montreal.

1890—W. A. Kneeland, B.C.L. '90.
1894—A. E. Jones, B.C.L. '94.
1899-'01—Mrs. J. D. Trees.
1900—Chas. R. Cook, Med. '00.
1904—R. Watson Graham, Med. '04.
1906—Andrew W. Hendry, B.A. '06.
1907—H. J. Black, B.Sc. '07.
1908—Mrs. Leonard Hughes-Jones, M.A. '10.
1911-'13—J. F. O'Shaughnessy, Med. '11-'13.
A. J. Merrill, B.Sc. '11.
1912—Rev. Herbert L. Johnson, B.A. '12.
1913—Wm. Gordon Irving, M.A., '13.
1914—Hamilton C. Hughes, B.Sc. '14.
J. C. Day, B.Sc. '14.
1919—L. H. Nichols, B.A. '19.
1923—Alphonse Bleau, B.Sc. '23.
Kenneth Eldon Fleming, B.Sc. '23.
Andrew R. McIntyre, B.A. '23.
1924—Jas. Cobden Trueman, M.Sc. '24.
J. P. Bethel, B.A. '24.
1925—Thos. P. Cochran, B.Sc. '25.
Robt. H. Duval, B.Sc.
Frank Millington, Jr., B.Com. '25.
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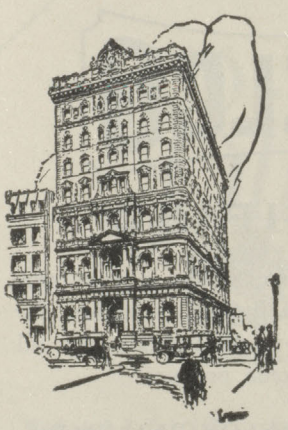


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One Winter Day

(*Continued from page* 23)

from a new air survey map which Mr. George Côté, the *arpenteur en chef*, had made and sent us from Quebec. Presently we came to Stacker Lake, the guidepost of the north, then to another landmark, the "Y," where the Rivière du Chef joins the Chamouchouan. At this point the Chamouchouan, the old Indian water trail to the west, bends off southward. We could see where it almost reached the headwaters of the St. Maurice. In this central area the streams which feed the Saguenay, the St. Maurice, and the Gatineau are only a few miles apart and a canoe can make its way from Roberval to Ottawa. In an hour and a quarter we covered the 125 miles to Chibougamau, and in front of us lay the expanse of white, broken by islands and promontories filling half the lake. We could just make out the line of the winter road from St. Felicien, winding through the trees; a moving dot on the lake was a sledge on its way to the camps. We landed at the Chibougamau Prospectors' shack. They have a famous cook, Alec by name, and he, with a few hardy prospectors, an Indian guide, and the fire ranger made quite a party to meet us. We had some hot tea and cake which would make most confectioners look to their laurels. Then there was a cabaret. Alec turned handsprings in the snow while the camera clicked.

We taxied across an arm of the lake to the fire ranger's camp, a well built, comfortable looking group of log cabins, picked up a gasoline pump, and took off for Bear Bay at the north-east corner of the lake, where we landed to refuel. Here we were met again. The wife of the engineer at the Chibougamau-McKenzie mine with her two enormous mastiffs came along the track from her camp. Her moccassins were the only evidence in her dress that she was not on Sherbrooke Street. This was a real chance for the camera man.

Taking off was not so easy. The sun was surprisingly hot and the snow very soft; in consequence, the tail ski was deep in the drift and the others were glued fast. A little energy on the part of all concerned got us loose, and we took off again for the north. In a few minutes we were flying across the height of land, the watershed between the St. Lawrence and Hudson's Bay. Half an hour more and we saw stretching off to the northeast the eighty miles of Lake Mistassini—at last one youthful dream had been realized.

We were clocking off the miles on the map and I told Mr. Graham to watch for the Hudson's Bay post; it is at the upper end of a long channel between a great peninsula and the mainland. There it was—a microscopic cluster of roofs, the post itself and the airmail post office—northern terminus of the service run by

the Compagnie Aérienne Franco-Canadienne. This route starts at Escalana on the C.N.R. and is well equipped with telephones and shelter cabins. But we were bound for a farther goal and flew on across the lake twenty miles or so and half its length to the north. At 3.30 we saw the Rupert River winding off to the west, and below us a bay on which we could see the wings of the other machine—we had just kept our appointment for tea. The camera clicked as we spiraled down for 5,000 feet, and we disembarked to be met by Pete Vachon, his brother, the engineer-doctor, and Mr. Drolet, the oldest hand in the country.

He and his boy, Joe., and their two dogs, were the only inhabitants of this northerly settlement. The sun was still hot. The cameraman discovered when he developed his films that the actinic value of the light was extraordinarily strong; far stronger than in a more southern latitude. Whatever the actual temperature was, we were quite comfortable without cap or gloves. Drolet showed us one of the fifteen-pound grey trout used for dog feed and told us that there were red trout just as large, and extremely good to eat. Now that freighting fresh fish by air has become a paying business, Lake Mistassini may become a useful reservoir of food.

We missed seeing any pelts. The camp, which has since been taken over by the Hudson's Bay Company, was a trading station for the Indians of New Quebec and a shipment of skins had just gone off to the south. Everything else was photographed—ourselves, the cabins among the trees, even the dogs, who did not mind action pictures, but strongly objected to close-ups. Then we set out again for home.

The wind had worked around to the northwest and our pilot, calculating that it would be stronger higher up, climbed in a spiral to 6,000 feet. He was right about the wind; we covered the 30 miles to the Hudson's Bay post in 11 minutes. We circled down for a close shot, then climbed again—this time to above 6,000.

We raced on through the sky. The heads of the two pilots were silhouetted against the blue. Now Lake Duberger lay a mile below us, a hundred miles to the northeast was the sunlit snow on the Montagnes Blanches. We crossed more lakes and rivers. The straight channel of the Nestawkanon ran north and south, we were over the great forest reserve of Quebec—eighty miles from anywhere. Now in the southeast we saw Lake St. John and swung towards its northern end, following the Mistassini River. Suddenly we were over a town. We had reached Dolbeau, the Lake St. John Power and Paper Company's mills, and the Canadian National terminus—two hundred miles in seventy-five minutes!

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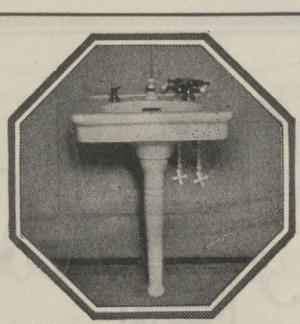
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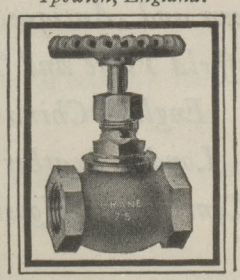
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Births

Ambridge—At Quebec, on March 25th, to D. W. Ambridge, Sci. '23, and Mrs. Ambridge, a daughter.

Amos—In Montreal, on March 22nd, to Dr. E. A. Amos, Med. '24, and Mrs. Amos, a son.

Ashby—In Montreal, on February 8th, to Reginald B. Ashby, Sci. '24, and Mrs. Ashby, a daughter.

Blachford—In Montreal, on February 13th, to H. Lloyd Blachford, Sci. '18, and Mrs. Blachford, a daughter.

Blumenfeld—In Montreal, on February 25th, to Dr. E. A. Blumenfeld, Med. '24, and Mrs. Blumenfeld, a daughter.

Buckley—In Montreal, on February 23rd, to P. B. Buckley, Sci. '15, and Mrs. Buckley, a son.

Claxton—In Montreal, on February 18th, to Brooke Claxton, Law '21, and Mrs. Claxton, a son.

Congleton—At Minstead Lodge, Lyndhurst, Hants, on March 11th, to Lord Congleton, Sci. '21, and Lady Congleton, a son.

Convery—In Quebec, on March 18th, to Dr. E. B. Convery, Med. '14, and Mrs. Convery, a daughter.

Crocker—In Montreal, on February 14th, to Willard F. Crocker, past student, and Mrs. Crocker, a son (died April 22nd, 1930).

Dion—In Montreal, on March 15th, to J. Edgar Dion, Sci. '27, and Mrs. Dion, a daughter.

Eaton—At Shawinigan Falls, P.Q., on January 20th, 1930, to Milton Eaton, Sci. '21, and Mrs. Eaton (Adela Stewart, Arts '22), a son.

Farquharson—In Montreal, on April 1st, to John S. Farquharson, Sci. '22, and Mrs. Farquharson, a daughter.

Gross—In Toronto, on March 22nd, to Philip N. Gross, Sci. '25, and Mrs. Gross, a son.

Hodgins—At Macdonald College, Que., on February 20th, to Norris Hodgins, Agr. '20, and Mrs. Hodgins, a son.

Goldberg—In Montreal, on February 14th, to Dr. J. Goldberg, Med. '27, and Mrs. Goldberg, a daughter.

Keeble—On January 8th, 1930, in England, to Mr. and Mrs. E. A. Keeble (Jessie Thornton '21), a daughter.

Lantz—In Charlottetown, P.E.I., on April 11th, to Dr. J. P. Lantz, Med. '25, and Mrs. Lantz (Dorothy Brodie, Arts '26), a daughter.

Lax—In Montreal, on March 23rd, to Dr. Abel Lax, Med. '24, and Mrs. Lax, a son.

Lindsay—In Montreal, on February 10th, to Dr. Lionel M. Lindsay, Med. '09, and Mrs. Lindsay, a daughter.

Luke—In Montreal, on March 4th, to Morley C. Luke, Sci. '23, and Mrs. Luke, a son.

Mason—In Montreal, on February 24th, to Dr. Edward H. Mason, Med. '14, and Mrs. Mason, a daughter.

Matthews—In Vancouver, B.C., on February 24th, to Dr. Gordon O. Matthews, Med. '24, and Mrs. Matthews, a daughter.

McCormack—In Ottawa, on November 24th, 1929, to Dr. C. V. McCormack, Med. '26, and Mrs. McCormack, of Renfrew, Ontario, a daughter.

McGiverin—At Victoria, B.C., on April 11th, to H. M. McGiverin, past student, and Mrs. McGiverin, a daughter.

McKenzie—In Montreal, on April 11th, to C. Russell McKenzie, Arts '16, and Mrs. McKenzie, a son.

McLennan—In Montreal, on March 11th, to W. Durie McLennan, Arch. '14, and Mrs. McLennan, a daughter.

McMurtry—In Westmount, on February 18th, to A. O. McMurtry, Arts '10, and Mrs. McMurtry, a daughter.

McVittie—In Montreal, on March 26th, to T. J. McVittie, Arts '12, and Mrs. McVittie, a son.

Mulcair—In Montreal, on March 11th, to John Mulcair, Law '15, and Mrs. Mulcair, a daughter.

Munro—On December 9th, 1929, to Mr. and Mrs. Donald Munro (Gwendolyn Ewing '20) of Beaupré, Que., a son.

PEDLEY—In Montreal, on April 12th, to Dr. Frank G. Pedley, Arts '13, Med. '16, and Mrs. Pedley, a daughter.

ROCHESTER—In Ottawa, on April 25th, to W. L. Rochester, Sci. '24, and Mrs. Rochester, a daughter.

RYAN—At Seattle, Wash., on February 16th, 1930, to Dr. Clarence A. Ryan, Med. '20, and Mrs. Ryan (Evelyn Lipsett, Arts '16), a son.

SCOTT—In Quebec, on February 15th, to Arthur A. Scott, M.Sc., Sci. '11, and Mrs. Scott (Clarissa D. Hemming, Arts '21), a daughter.

SHEPHERD—In St. Lambert, Que., on February 28th, to R. W. Shepherd, past student, and Mrs. Shepherd (Kathleen C. Baker, Arts '17), a daughter.

SCHERZER—In Montreal, on February 20th, to Dr. Moses Scherzer, Med. '21, and Mrs. Scherzer, a son.

SNOW—At Arvida, Que., on April 14th, to Dr. Vernon A. Snow, Med. '26, and Mrs. Snow, a son.

STACKHOUSE—In Westmount, on March 3rd, to the Hon. Russell T. Stackhouse, Law '06, and Mrs. Stackhouse, a daughter.

THURBER—In El Paso, Texas, on February 5th, 1930, to Dr. Donald S. Thurber, Med. '25, and Mrs. Thurber, a daughter.

TROSSMAN—In Montreal, on March 7th, to Dr. I. Trossman, Med. '19, and Mrs. Trossman, a daughter.

WEBSTER—In Montreal, on April 8th, to Colin W. Webster, Arts '24, and Mrs. Webster, a son.

WINSLOW—In Montreal, on April 30th, to Terence H. Winslow, Arts '23, and Mrs. Winslow, a son.

* * *

Marriages

ADDY—At Saint John, N.B., in February, Miss Grace Hastings Fleming and Dr. George A. Belden Addy, Med. '90.

BOSTOCK—In Pasadena, California, in April, Miss Violet Craigie Hamilton and Hugh Samuel Bostock, Sci. '24.

BOYD—In Montreal, on April 29th, Miss Lilian M. Corneille and Leslie Hale Boyd, Arts '94, Law '97.

CASEY—At Antigonish, N.S., in April, Miss Ino Josepha Chisholm and Dr. Edward Manning R. Casey, Med. '28, of Montreal.

COLLIER-WILLIS—At Hong Kong, China, on March 25th, 1930, Harold F. Collier, Sci. '11, and Frances Dorothy Willis, Arts '09.

DALE—In Nice, France, on April 3rd, Miss Anna Clunie Dale, past student, and David Lindsay Keir, Dean of University College, Oxford.

DELAHANTY—In London, England, on April 23rd, Miss Sylvia Margaret Deacon and Michael Patrick Delahanty, past student, of Montreal.

ESDALE—In New York City, on April 5th, Miss Lilian Estelle Hurd and Dr. W. Rupert Esdale, Med. '26.

FOSTER—In Montreal, on March 22nd, Miss Anne Olga Irene Todd, Toronto, and Dr. Lowell Shields Foster, Med. '09, of Montreal.

KUNTZ—In Ottawa, in April, Miss Marjorie Helen Fournier and Dr. Alfred Edward Kuntz, Med. '25.

MANSON—In Edmonton, Alberta, on April 30th, Miss Ina Victoria Currie and Dr. Arthur Bennett Manson, Med. '25, of Cassidy, B.C.

NAYLOR—In Quebec, on April 23rd, Miss Mary Barton and Rev. Reuben Kenneth Naylor, Arts '06, of Montreal.

RENOUF—In Montreal, on February 26th, Miss Helen Easton Hunter and Edward T. Renouf, Sci. '23.

RUSSEL—In Montreal, on April 10th, Miss Dorothy Margaret Russel, Arts '23, and Archibald Lyle Williams.

SIMPSON—In Montreal, on May 8th, Miss Katherine Gilmour and Dr. Robert Geoffrey Simpson, Arts '24, Dent. '27.

SMITH—On April 23rd, in Montreal, Miss Marjorie Bain Bremner and Arthur Ives Smith, Arts '19, Law '21.

TREMBLE—In Windsor, Ont., on April 12th, Miss Mary Gemmel Hamilton and Dr. George Edward Tremble, Med. '21, of Montreal.

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Notes

(Continued from page 27)

Lecturing before the Montreal Women's Club in March on "Astronomy, Ancient and Modern," Dr. A. V. Douglas (Arts '20, M.Sc. '21), stated that, in co-operation with the Dominion observatory, special research was being conducted at McGill to discover the true nature and behaviour of the Cepheid stars.

Applied Geophysics in the Search for Minerals is the title of a book by Dr. A. S. Eve and Professor D. A. Keys, of the Department of Physics, published some months ago by the University Press, Cambridge, England. Reviewing the book, *Nature* says in part, "the authors have carefully steered between the dubious imaginativeness of the 'popular' account and the bleak inhospitality of the specialist exposition, and have produced a sound, well-balanced treatise."

In April a party of headmasters of English public schools arrived in Canada on a six weeks' tour of inspection. Reaching Montreal on April 11th, the headmasters assembled in the Council Room at McGill and were taken to see the Medical Building, the Biological Building, the University Library, the Gest Chinese Research Library, the Engineering, Chemistry, and Physics Buildings, and finally the Pulp and Paper Research Institute on University Street. None of the headmasters had visited Canada before and all were deeply interested in what was shown to them.

At a meeting of the University Corporation held in April, Dean Ira Mackay, of the Faculty of Arts, reported that higher standards of admission to the Faculty had resulted in the total disappearance of "Christmas Graduates." Last year out of a class of 288 freshmen, 85 were required to leave at Christmas, as they could not maintain the standard that was essential. This year all members of the freshman class could be permitted to take their examinations at the end of the academic year.

Kappa Epsilon Tau, an honorary engineering fraternity, was established at McGill this spring. Professor R. de L. French, Professor of Highway and Municipal Engineering, is the Honorary President, and Professor C. M. McKergow is an honorary member.

In April the Corporation of the University announced that the standard of the McGill Library School had been raised, so that the one-year course would now be open only to those who held a B.A. degree, instead of to those holding a certificate of Senior Matriculation.

Three essays by McGill men, submitted in the Royal Bank Economics Fellowship Essay Competition, have been published by the Bank in conjunction with the winning essay, written by H. C. Flegg, of Queen's University. The McGill men, G. M. Rountree ('31), A. D. Fraser ('31), and D. C. Munroe, a graduate, wrote respectively on "Canadian Policy Concerning Commercial Treaties," "Should Canada adopt a Quota System?" and "A Canadian Mercantile Marine Policy."

On the evening of February 11th, 200 representatives from 18 Canadian universities and colleges attended a smoker in the Canadian Club, New York City. Thirty-one McGill men were present, including C. W. Ryan (Sci. '16), Secretary of the New York Branch of the Graduates' Society.

The members of the New York Branch of the Graduates' Society dined at the Canadian Club, Hotel Belmont, on the evening of May 2nd. Dr. W. Reid Blair, head of the New York Zoological Park, addressed the members, his subject being "Wild Animal Life on Barro Colorado."

Members of St. James Literary Society, Montreal, were addressed in March by Dr. A. Norman Shaw, Professor of Physics, who lectured on "Natural Philosophy To-Day." As an illustration of the value of physical investigation, Dr. Shaw remarked that investigations of the past century have put 5,000,000 horsepower of electricity to work in Canada today. This equals the effort of 50-million men, working 24 hours in the day, the result being of incalculable value to the welfare and prosperity of the whole Dominion.

Professor F. E. Lloyd, Professor G. W. Scarth, and R. D. Gibb, of the Department of Botany, will attend the fifth International Botanical Congress to be held in August at Cambridge, England. Professor Lloyd will deliver a paper at the Congress on the subject of insect-eating plants.

Professor Philip J. Turner, of the Department of Architecture, addressed the Arts and Letters Club of Montreal on April 14th, his subject being "Modern Trends in Architecture." Dealing with the modern skyscraper, Professor Turner expressed the opinion that labour operations in the future would be minimized by more skilled work being accomplished in factories remote from the scene of building and less on the actual construction job. By this means, prohibitive building costs might in the future be avoided.

Sir Stopford Brunton (Sci. '10, M.Sc. '12) has prepared an interesting memorandum comparing the earthquake in the Province of Quebec in 1663, as described in the *Jesuit Relations*, with that experienced on November 18th, 1929, in the Maritime Provinces, as described by employees on his farm at Halfway Brook, Nova Scotia. The similarity in the sequence of events, with a rumbling noise coming first, a crackling noise, suggesting flames, a sudden jar, and finally the swaying of houses, barns, and their equipment, is most striking.

The Ottawa Valley Branch of the Graduates' Society reports a busy season, the activities including the annual meeting, which Dean Martin addressed; a conversazione, at which interesting addresses on "The Control of Parasitic Insects" were delivered by Mr. Arthur Gibson, Dominion Entomologist, and members of his staff; and the annual dinner at the Chateau Laurier in Easter week. G. Gordon Gale (Sci. '03, M.Sc. '05) is President of the Ottawa Valley Society this year, and the Honorary President is P. D. Ross (Sci. '78).

Following approval by the joint committee of the Royal Victoria and Montreal General Hospitals, the appointment of Dr. John R. Fraser (Med. '10) to succeed Dr. W. W. Chipman as Obstetrician and Gynæcologist in Chief at the Royal Victoria Montreal Maternity Hospital was announced in February. Dr. Fraser has also been appointed to succeed Dr. Chipman as Chairman of the Department of Obstetrics and Gynæcology in the Medical Faculty at McGill.

At a meeting of the Canadian Chemical Association, Toronto Branch, in February, Drs. F. G. Banting and C. H. Best, co-discoverers of insulin, paid warm tribute to Dr. J. B. Collip, chairman of the Department of Bio-Chemistry at McGill, who had been associated in their work on insulin, for his recent production of a hormone from the placental gland. Dr. Banting extended his "warmest congratulations on a magnificent piece of work" and Dr. Best declared the medical profession was proud that a Canadian had made "this great discovery of a new active principle so valuable to medical science."

Press despatches in March concerning the murder in Cleveland, Ohio, of Dr. Alfred Scully stated that the dead man was a graduate in medicine of McGill. The Registrar's office of the University state that the reports are in error, as no record of Dr. Scully's attendance at McGill can be traced.

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Athletics

INTERCOLLEGIATE TITLE-HOLDERS 1929-1930

At the conclusion of the 1929-1930 season of Canadian inter-collegiate athletics, championships in the fourteen branches of sport were held as follows:

Basketball	Queen's
Boxing, Wrestling, and Fencing	McGill
English Rugby	McGill
Golf	Toronto
Gymnasium	McGill
Harrier	Toronto
Hockey	McGill
Rugby Football	Queen's
Soccer Football	Toronto
Swimming	McGill
Water Polo	Toronto
Tennis	McGill
Track	Toronto
Rowing	Toronto

Colours

Increased athletic activity at McGill is indicated by the award of colours announced by the Athletic Office in March. Forty-nine first grade colours were granted, 12 for Rugby football, seven each for hockey and track, six each for basketball and boxing, wrestling, and fencing, five for English Rugby, two each for tennis and skiing, and one each for swimming and gymnastics.

In addition to the major awards, 96 second grade colours, 93 third grade colours, and 55 numerals were awarded. Additional numerals remain to be granted, but the total of 293 awards to date, when compared with 176 in 1929, would indicate that participation in sport at the University has increased markedly, particularly in those branches of sport which permit of inter-faculty and intra-mural endeavour.

Football

Though it is too early yet to weigh intelligently the prospect for success or failure of McGill's Senior Inter-collegiate Rugby Football team in the coming season, the good wishes of all loyal followers of the Red and White may be extended to Major D. Stuart Forbes, Athletic Manager at McGill, who has been named honorary coach of the senior squad by the Athletic Board. With his knowledge of the game, gained as a player and as Athletic Manager, the team is assured of coaching in which no pains will be spared to prepare an attack and defence strong enough to bring the Inter-collegiate title back to Montreal, where McGill men, at least, will agree it should belong.

Rifle Shooting

In March, in a contest on the ranges of the Montreal High School, a team from the McGill Indoor Rifle Club defeated a team from the University of Vermont by a score of 955-930. The shoot was conducted according to Canadian regulations, six men on each team firing from a prone position on D. C. R. A. targets at 75 feet, the five highest scores counting with the sixth score to be used only in the event of a tie. Ogilvy, of McGill, was the highest individual scorer with 194, and Ward-well, of Vermont, was second with 193.

Rugby Schedule for 1930

As some out-of-town readers of the *News* might wish to visit Montreal on the occasion of the McGill football games this autumn, and might wish to plan their excursion in advance, we print below the schedule of McGill's home games:

September 27th	Exhibition.
October 4th	Royal Military College.
October 18th	Queen's.
November 1st	Toronto.
November 8th	Western Ontario.

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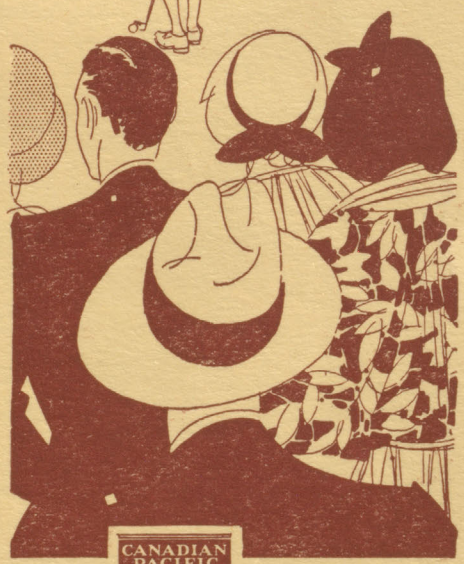
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The McGILL NEWS

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Please address all communications to the Secretary, Graduates' Society, McGill University, Montreal

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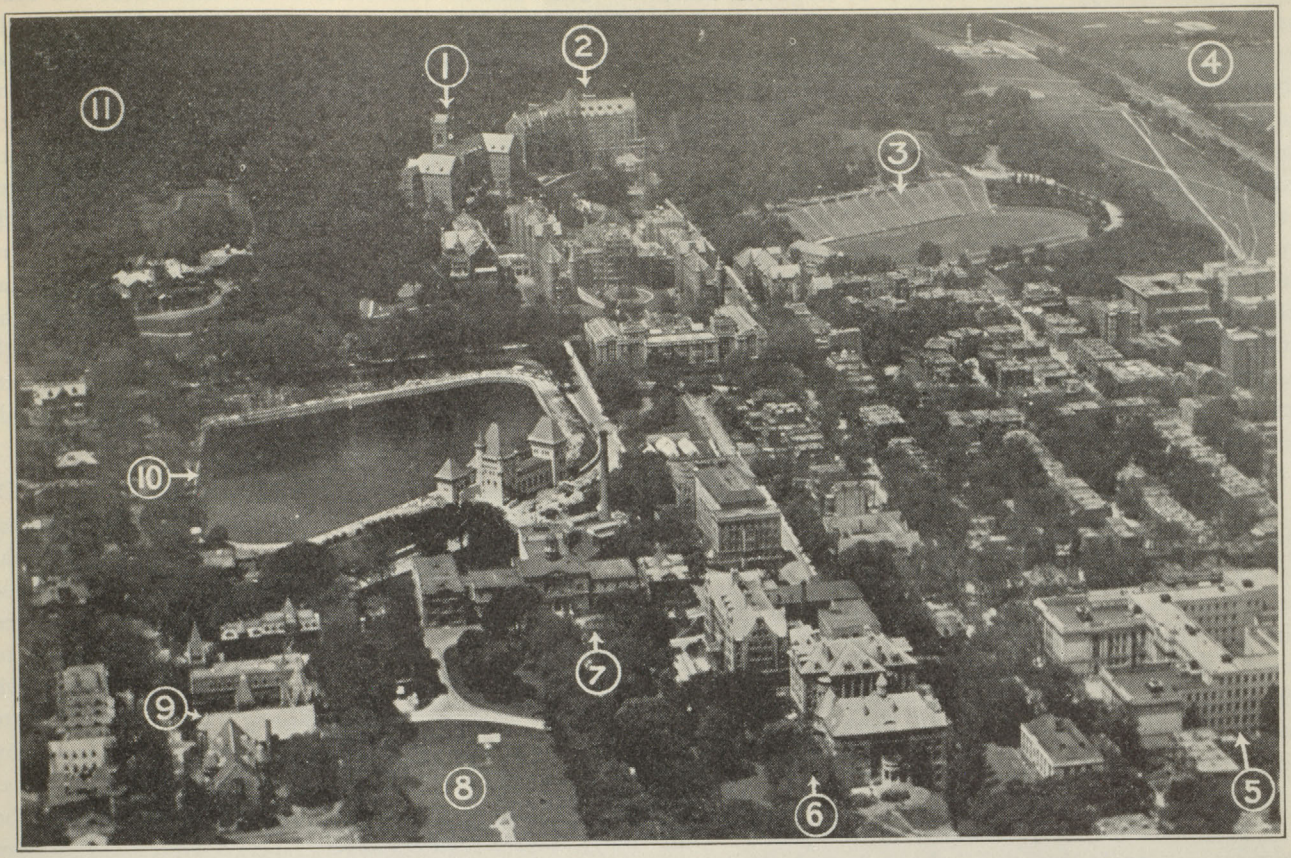
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This photograph, taken from a height of 800 feet by the Curtiss-Reid Flying Services, shows, among other features: (1) Ross Memorial Pavilion, (2) Women's Pavilion, Main Buildings, Royal Victoria Hospital, and McGill Medical Building, (3) Percival Molson Memorial Stadium and, above, the New Playing Field, (4) Fletcher's Field, (5) Montreal High School, (6) Physics, Chemistry, and Engineering Buildings, (7) Arts Building, (8) The Old Campus, (9) The Library, (10) City Reservoir and new Power House, (11) Mount Royal Park.

The University Library: 1920-1930

G. R. LOMER, M.A., PH.D.
University Librarian

AS a McGill graduate, you are entitled to be kept in touch with the progress that your Alma Mater is making year by year. That is one of the reasons for the existence of the *McGill News*. In its columns, you have from time to time read, among the other items, notes regarding the University Library and its activities, but now that a decade has elapsed since the appointment of Sir Arthur Currie as Principal of the University, it would seem an appropriate time to review the progress made by the University Library during these ten years. From such a review, you may gain some idea of what problems have had to be met, what progress has been made, and what still remains to be done. And if in the future development of this branch of your Alma Mater you see some way, no matter how small or modest, in which you can lend a helping hand, you may be sure that your good will shall not go unappreciated or unremembered by the generations of students still to come. These must spend no small part of their four college years with books, either for study or inspiration. As Milton so finely said: "A good book is the precious life-blood of a master spirit, embalmed and treasured up in purpose to a life beyond life." The Library thus takes its place as one of the great institutions established to hand on the inheritance of the race from one generation of students to another.

Every institution has its vicissitudes, and certainly no university and no university library has ever been exempt from the buffet of fortune. When the present librarian assumed office in January, 1920, the Library was carrying on as best it could, feeling still the limitations and the depressing effects of the War, and, more immediately, the loss of its director, Charles H. Gould, who had so ably and so courageously guided its fortunes since his

appointment in 1893. It should never be forgotten that, through the generosity and foresight of Mr. and Mrs. Peter Redpath, Mr. Gould was able, by patient and laborious persistence in the face of discouraging obstacles, to develop, from a small and restricted college library, a great and efficient university library. The professional esteem in which Mr. Gould was held is indicated by his election as President of the American Library Association in 1909. During his tenure of office in the Library of McGill University, Mr. Gould had to struggle against those difficulties that beset all university librarians in all climes and ages: inadequate funds, insufficient staff, lack of interest on the part of the graduates and even of the university authorities themselves, too small a building, too few books, and the diversion of energy into committee work.

Possibly the time will never come when university librarians do not have to struggle with some of these adverse conditions; but you may be glad to know that during the last ten years something has been done by the Principal and Governors of your University to ameliorate some of these difficulties: the funds, though still insufficient, have been increased; the staff, though still inadequate for the necessary work, has been increased and is better trained; and the building, though now full to overflowing, was enlarged in 1922.

A comparison between the activities of the Library ten years ago and today may help to show how it has grown. Ten years ago, there was no Library Museum or Exhibits, no Winter Library School, no Emma Shearer Wood Library of Ornithology, no Blacker Library of Zoology, no Gest Chinese Research Library, no Periodical Room, no Catalogue of Scientific Periodicals, no organizing of Departmental Libraries, and no Freshman Reading Room.

That the usefulness of the Library has grown is proved by the statistics of the last ten years, which are given in table form below.*

The Finance Committee of the Governors has dealt with the Library as generously as conditions would allow. At the time of the Centennial drive, a sum was set aside for an enlargement of the building, sufficient for ten years at the utmost, under normal conditions of growth; additions to the staff were made from time to time after the need became obvious; and there were slight increases in the salaries of a portion of the staff. The fact remains, however, that the present space is inadequate, that the staff should be more numerous, that an adequate salary scale should be adopted, and that the annual appropriation should be more in keeping with the needs of the students and professors. There has been no increase in the appropriation for books and periodicals in the last four years.

The establishment of courses leading to the Ph.D. was undertaken without apparent regard to the resources of the Library, or the Library equipment that such advanced instruction and investigation presuppose or involve. As a result, this degree cannot be offered in certain departments until funds are forthcoming to provide the necessary books. The Library has grown up in the past forty years largely as an undergraduate library, and the policy of wise selection inaugurated by Mr. Gould has made it possible to supply material needed in most courses for the M.A. degree. But the Ph.D. degree requires older, rarer, completer, and more expensive books and periodicals; and the problem is further complicated by the rapid exhaustion of the possible subjects for these in some of the more popular departments.

The Library Committee is a thoroughly representative body, and enables the Library to keep in touch with the interests of all faculties and schools. Its Chairman is the Principal, and its Secretary is the Librarian. The Governors, Corporation, the Graduates, the Faculties are all represented by members whom they themselves

*LIBRARY STATISTICS

1919-1929

Years	Readers	Books Loaned		Total*	Accessions	Catalogue Cards Filed
		Redpath	U.B. Club			
1919-'20	30,454	16,580	7,129	27,649	7,328	7,500
1920-'21	40,472	40,809	8,914	49,723	6,296	18,900
1921-'22	43,575	54,944	11,114	71,279	10,420	24,955
1922-'23	53,429	62,585	12,936	76,624	12,017	
1923-'24	48,886	65,712	13,461	81,701	13,103	39,306
1924-'25	49,800	51,560	12,236	66,936	12,256	40,070
1925-'26	58,888	41,370	13,228	64,847	11,503	51,913
1926-'27	68,402	62,654	13,585	100,383	8,617	37,258
1927-'28	74,964	72,393	13,767	111,527	10,242	38,504
1928-'29	83,777	62,694	14,698	107,466	11,821	47,272

*Including Law, Medical, R.V.C. Libraries, etc.



THE UNIVERSITY LIBRARY

The first portion of the Library, given by Peter Redpath, Esq., was completed in 1893, an addition was given by the late Mrs. Peter Redpath, and the most recent addition was built with money from the Centennial Fund.

appoint for a term of three years. To these, the Librarian and his staff are grateful for continued assistance, encouragement, and interest. It is with the greatest regret that the Committee has had to record the deaths of such valued members as Sir Thomas Roddick, Dr. William Gardner, Mr. C. J. Fleet, K.C., Professor Paul T. Lafleur, Dr. R. F. Ruttan, and Mr. Eugène Lafleur, K.C.

Most readers, who do not know the necessarily intricate routine of a large library, are unaware of the amount of accurate and detailed work involved in the proper classification and cataloguing of books, yet it is the care exercised in this respect by the Library staff, and the arrangement of the stack, which enable this Library to have an enviable record for speed in the delivery of books. The card catalogue itself was Mr. Gould's pride, and every effort has been made to maintain the high standard which he set. In this respect, and in all other departments of the Library, the staff is to be commended for its devotion and efficiency. The Committee has, in the matter of appointments, consistently attempted to raise the standard by requiring professional training on the part of an applicant for a position on the staff. It is largely due to the *esprit de corps* of the staff that so much has been accomplished.

The work of the Librarian, in addition to the administration of the Redpath Library and the supervision of the departmental and faculty libraries, has involved both the direction of the Library School and teaching in it; the editorial preparation of the *Catalogue of Scientific Periodicals*, and the annual *University Bibliography;* the administration of the reprints, known as the University Publications; the chairmanship of the Administrative Sub-Committee of the McCord National Museum; and service on various other University committees. It is becoming increasingly evident that an Assistant Librarian should be appointed to undertake part of the inevitable and increasing amount of routine work devolving upon the office of the Librarian.

The problem of departmental libraries is always, theoretically, a difficult, perhaps an insoluble, one,

but in practice we have found a reasonable and co-operative compromise. The libraries in the Departments of Chemistry, Botany and Physics, in buildings of their own across the Campus, meet the needs of their professors and advanced students. Here the emphasis is necessarily upon two classes of material: the latest editions of recognized reference books and the current numbers of technical periodicals. Departmental libraries are expensive, often involving duplication, and increasing the library staff (when not supervised temporarily by the departmental secretary), but the urgency of the need of books at hand during important experiments and investigations is felt to offset the additional cost to the University.

A special Architectural collection, known as the "Blackader Library of Architecture," has been established in honour of Captain Gordon Home Blackader, B.Arch. (McGill), who was wounded near Ypres on June 2nd, 1916, and died in London on August 20th of the same year.

"The Emma Shearer Wood Library of Ornithology" was presented by Colonel Casey A. Wood, M.D., LL.D., as a special research collection and reference library, rich in periodical and pamphlet material, for use by all who are interested in birds.

"The Blacker Library of Zoology" has been presented by Robert Roe Blacker and Nellie Canfield Blacker, as a comprehensive reference library on this special subject. In addition to standard works, it includes a number of monographs and an extensive collection of reports of scientific voyages and periodicals. It is supplemented by the Lyman Collection of books on Entomology.

These three collections are now housed in the latest addition to the library and are provided, in each case, with a reading room, adjacent to the new steel stacks which are devoted to these special libraries.

Students and investigators have the privilege of using the resources of the Gest Chinese Research Library, which contains, in addition to works in English and European languages, a Chinese collection of 102,500 ts'ê, bound in t'ao, on all subjects, and including an unusually large number of early rare and imperial editions, also a copy of the original edition of the great Chinese encyclopædia, *T'u She Chi Ch'êng*, of which the only other complete copy known is in the British Museum.

The Medical Library has made great strides of late under the able direction of Dr. C. F. Wylde, its Honorary Librarian. The staff has been increased, and large and numerous gaps in the periodical files have been filled. This progress has been due, in no small part, to the zealous interest of the Dean and some of the professors, whose support has helped to bring the Medical Library to a high level of efficiency.

The Osler Library is the latest addition to the book resources of the University. It contains 7,600 volumes on the history of medicine and science, collected by Sir William Osler, and is housed in a specially designed library in the Medical Building, under the direction of Dr. W. W. Francis, who is one of the editors of *Bibliotheca Osleriana*, published last year by the Oxford Press.

No history of the Library would be complete without a glowing tribute to the University Book Club, which has contributed a large number of recently published and valuable books to the shelves of the Library. Under the able direction of Miss Eileen B. Thompson, the Secretary, the membership has grown from under one hundred to over three hundred. The Club now supplies the latest publications, not only to members of the University, but to the class of Montreal residents who most miss a convenient and modern public library.

Founded in 1900, as a memorial to the late Mr. Hugh McLennan from his children, the Traveling Libraries of McGill University were endowed in 1911 by their founders. These libraries contain, each, from thirty to forty carefully selected volumes, and are sent, on application, and on payment of a nominal fee of $4.00, to schools, to country libraries, to reading clubs, and to small communities which possess no public library. Pictures, lantern slides, and lectures are also supplied by this department. Provision has also been made to send books by mail to graduates of the affiliated theological colleges and to ministers who have not the advantage of local libraries.

A growing amount of reference service is being rendered by the Library staff at the loan desk, over the telephone, and by correspondence. The Library is increasingly used as the best reference collection in the city, and, through the system of inter-library loans, its volumes are lent to other libraries and to Government departments in Canada and the United States.

Each year, at the beginning of the session, there is a demand for assistance, on the part of students, in the use of the Library. An attempt has been made to offer four lectures on this subject to instruct the students, but it is becoming more and more obvious that elementary instruction in the use of books, periodical indexes, encyclopædias, and the card catalogue, as a preliminary to bibliographical work, should be made a part of the Freshman course at McGill, as has been done in many other universities.

McGill University has the honour of having established the first Library Summer School in Canada in 1904, the first sessional Library Course of undergraduate character in 1927, and the first graduate Library School in 1930. For more than twenty-five years the Library School has been providing trained assistants, not only in this country, where there is a crying need for them, but also in the United States and in England. The Summer Course was originally four weeks in length, but

was extended to six weeks in 1923; and in 1930, for the first time, McGill conducted a similar session at the University of British Columbia, concurrently with that at McGill, in order to provide for the needs of the western sections of the country. The courses, both short and long, have been approved by the Committee of Library Training of the American Library Association, and to the recommendation of this Association the Library School owes the assistance and encouragement provided by the Carnegie Corporation. The course aims to provide instruction, in the summer, for assistants in small libraries and, in the winter session, to give to college graduates a thorough and inclusive training in classification and cataloguing, book selection, reference work, and general library routine and administration, so that they may be fitted to organize, direct, and develop special libraries, or school libraries, or carry on work, in a constructive way, in large public or university libraries.

In 1920, the Library employed one binder and a part-time assistant. In 1930, the University possesses a Bindery, with a superintendent, three men assistants, one woman, one boy, and seven girls. It does more and more of the Library binding, and undertakes high class binding for members of the University staff. The quality of its work is evidenced by the fact that it has taken prizes at the last two exhibitions of the Canadian Handicrafts. The Bindery is at present temporarily housed in the basement of the Medical Building, but proper headquarters should be provided for it in any addition to the University Library.

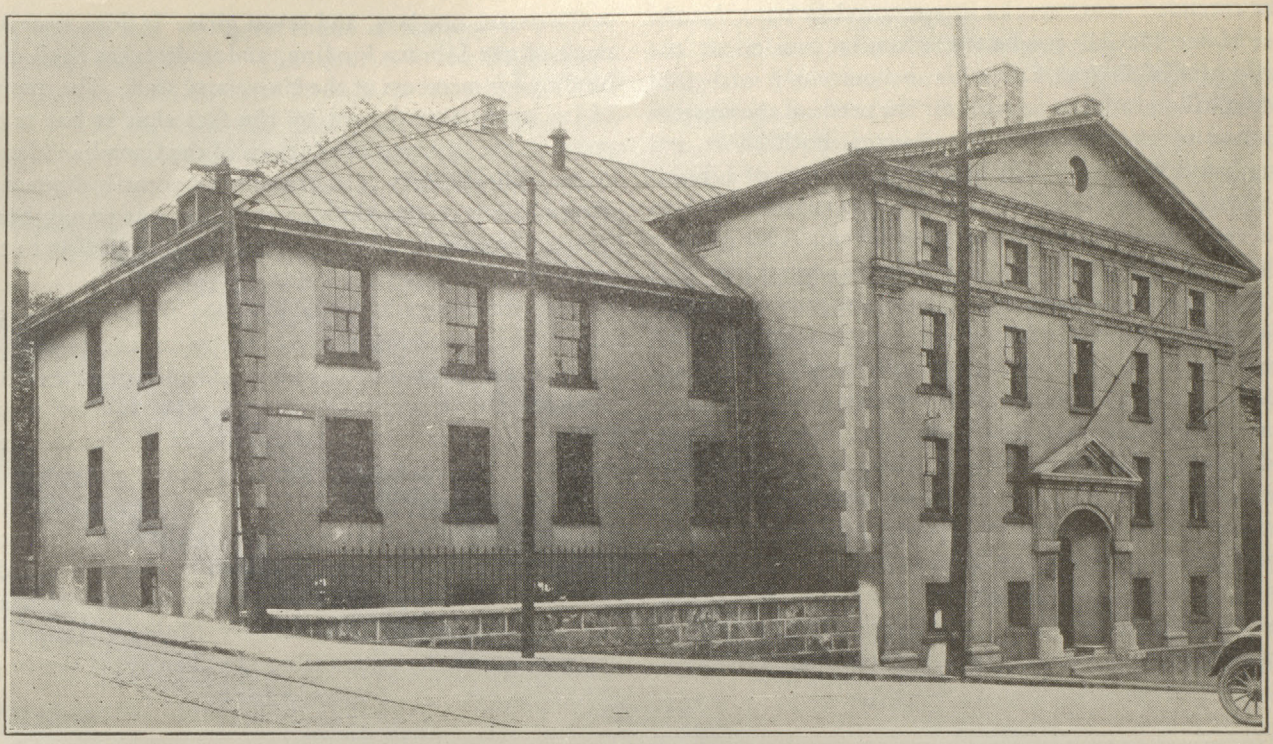
The University Library possesses treasures that are not sufficiently known to graduates or the public, in spite of the permanent display and numerous exhibits arranged for this special purpose. The oriental manuscripts, forming part of the Morgan Collection, the mediæval illuminations, many of them presented by Francis McLennan, LL.D., the early printing, including the Musson collection—all these are worthy of more than local note. They are supplemented by the splendid facsimiles presented by Lady Roddick, Mr. Howard Murray, and others. The Library Museum contains a permanent exhibit illustrating the history of the book

(Continued on page 27)



THE READING ROOM OF THE MEDICAL LIBRARY

Under the direction of Dr. C. F. Wylde, Honorary Librarian, the Medical Library staff has been increased, gaps in the periodical files have been filled, and the work of the Library has been brought to a high level of efficiency.



MORRIN COLLEGE

This photograph, taken specially for the *News*, shows the Morrin College building as it appears today.

Morrin College, Quebec

By Ethel L. Gale

ANY historical sketch of Morrin College might well open with the following quotation from the writings of Sir James LeMoine, the eminent Quebec historian: "The southern extreme of St. Stanislas street terminates at the intersection of Ste. Anne Street, past the old jail which dated from 1810. Lugubrious memories crowd around the massive tolbooth of which the only traces of the past are some vaulted lock-ups or cells beneath the rooms of the Literary and Historical Society, one of which, provided with a solid new iron door, is set apart for the reception of the priceless MSS. of the Society.

"The oak flooring of the passages to the cells exhibits many initials, telling a tale of more than one guilty life of remorse—let us hope—of repentance. The narrow door in the wall and the iron balcony over the chief entrance, leading formerly to the fatal drop, which cut short the earthly career of the assassin or burglar, was speedily removed when the directors of Morrin College, in 1870, purchased the building from the Government, to locate permanently the seat of learning due to the munificence of the late Joseph Morrin, M.D. The once familiar inscription over the prison door, the rendering of which in English was a favourite amusement to many of the juniors of the High School or Seminary on their way to class, has also disappeared.

'Carcer iste bonos a pravis vindicare possit!'

(May this prison teach the wicked for the edification of the good!)

The institution of learning, which had been housed for twelve years in the ancient building described by Sir James LeMoine, when writing in 1882, had its origin in the civic pride and Presbyterian ardour of Joseph Morrin, a physician of Quebec. On September 26th, 1860, Dr. Morrin appeared before Notaries Public of the City of Quebec, in company with the Reverend John Cook, D.D., Minister of St. Andrew's Church; William Stewart Smith, LL.D., later Professor of Classics in the College; and James Dean, Merchant, all of the City of Quebec, and declared his desire to establish a College of Divinity and Liberal Arts, as a lasting memorial of his regard for the City of Quebec, of which he had been a citizen for more than fifty years and over which he had twice presided as Chief Magistrate, and, at the same time, of marking his attachment to the church to which he had always belonged.

In accordance with the conditions under which the Deed of Trust was drawn up, application was made to the Provincial Parliament for an Act of Incorporation. This Act, passed in 1861, officially established Morrin College as an institution of higher learning and granted it the right to become affiliated to the University of Queen's College, or the University of Toronto, or McGill University.

The College was opened on November 6th, 1862, and lectures in the faculties of Arts and Divinity were started. As a suitable building had not yet been secured, these lectures were given in the Masonic Hall. Immediately after its opening, affiliation with McGill was secured and, from that time up to the year 1900, Morrin College carried on its work in Arts according to the requirements of McGill, and its students were entitled to present themselves to the University as candidates for degrees. In the Faculty of Divinity, the course of study was that recommended by the General Assembly of the Presbyterian Church in Canada.

Two classes had already graduated in Arts when the trustees of Morrin College purchased from the Government the building to which reference has already been made. By a vast amount of repairing and remodelling, they transformed what had been the city jail into the building then, and still, known as Morrin College. With good judgement and true Scottish thrift, they retained all that was serviceable, notably, the staircases whose steps, each a solid oaken block, were smoothed and hollowed by the tread of prisoner and warder long before they felt that of the Morrin student.

The building was spacious and a large part of its northern wing was leased to the Literary and Historical Society of Quebec for their museum and library. The south wing was made over in such a way as to provide lecture rooms, an assembly hall, and, on the upper floors, a few rooms for residence within the College. Thus installed in a way befitting the intention of its founder, the college entered upon a new stage of its career with bright prospects. It is true, the enrolment was not large, but there was reason to believe that, as the institution continued to offer to the community and district of Quebec a full training in Arts and Divinity, larger numbers of students would come in.

Under the Principalship of the Reverend John Cook, D.D., the College worked on effectively, if quietly, and from year to year prepared graduates in Arts and Divinity. In 1885, however, it made a new venture. McGill, the year before, had opened her halls to women for the first time. The effect of this action was felt almost at once in Quebec, and application for entrance to the Arts course of Morrin College was made by two adventurous spirits. There was no hesitation on the part of the governors to admit these applicants, who, entering with pioneering zeal upon the four years of their College training, graduated in 1889, exactly one year after a class of women students were capped for the first time in the Convocation Hall of McGill.

The classes at Morrin College were never large, and women students had all their lectures in common with the men. Indeed, almost the only recognition of the women's department at Morrin, aside from our seats in the lecture rooms, and the particularly pleasant manner which the professors adopted towards us, was a small dressing room at the head of the staircase leading from the entrance to the Assembly Hall. Here a table and a deep window seat provided us with space for text books, note books, and such properties as would not hang on the hooks provided for our hats and coats, or gowns. The age of luxury had not arrived—or, perhaps, we were not sure enough of our status to make demands—and we seem to have been satisfied with these conditions. However, there did come a day when stirrings of a noble discontent were apparent and a group of women students assessed themselves for an amount sufficient to curtain the windows, supply a much desired mirror, and add to the room a few touches suggestive of its feminine occupation.

Morrin, of course, had its share of student activities. These, as far as can be recalled, were of an intellectual type and did not include the sports and athletics which are now considered essentials of college life. For a few years a magazine flourished under the title *The Morrin College Review*. A copy, dated January 1st, 1884, contains editorials that might well have been penned in the "pensive citadel" of some Presbyterian theolog.; verse, suggestive of Miltonic inspiration; and the usual column of local and personal innuendo.

A Glee Club also existed. Whether or not this club fulfilled the object with which it was organized "to concern itself with the study and practice of music" it certainly added interest to the meetings of the Debating Society. For the Divinity Students, there was the Students' Missionary Society, which had for its object mission work, mainly within the Presbytery of Quebec. There was also the Alma Mater Society, which sought to foster "a fraternal spirit" among students and ex-students.

In reviewing the history of Morrin College, one is impressed by the few changes that occurred on its staff. Dr. Cook, who in 1860 was appointed its first Principal, filled that post till 1892. To his wise and effective methods throughout these years was due much of the success attained by the College.

For almost as many years, Dr. George Weir, a scholarly classicist, was Professor of Hebrew and Classics. One recalls with delight the hours in his lecture room, how, after our halting recitations were over, Dr. Weir would take the period in hand. First there would come his sonorous reading of the Greek or Latin text, then the rendering of the lesson in his own incomparable English. Sometimes there would be a sudden descent from the platform and the perplexed student would find him-

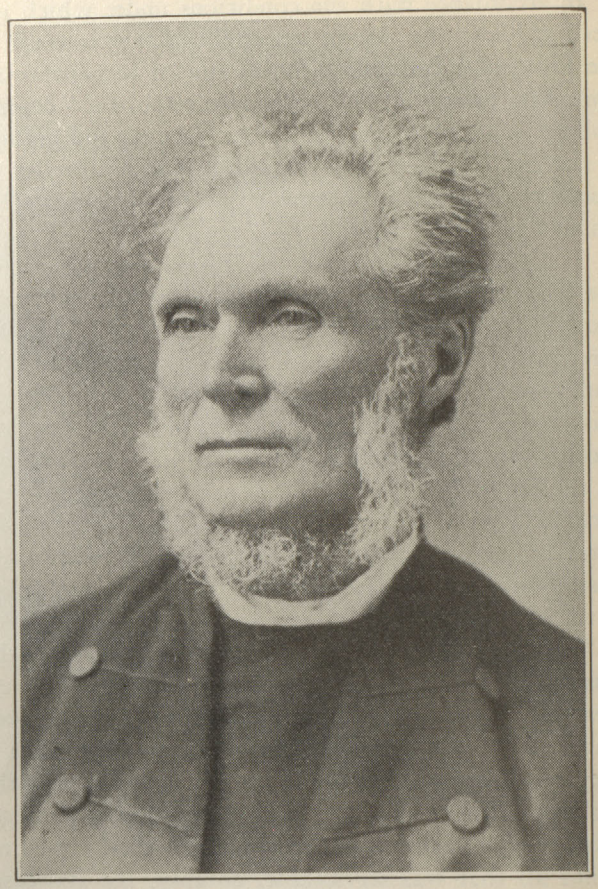
self overshadowed by a gowned form, his work scrutinized by a compassionate, if critical, eye, and his violations of style indicated by an infallible forefinger. It is interesting for those of us who studied under Dr. Weir to know that Dr. Woodhead, who is Chairman of the Classical Department at McGill, is his grandson. Dr. Weir died in 1900. Professor Crockett, who succeeded him, was another eminent scholar, and upheld worthily the high standards of his predecessor.

Continuity of office was seen also in the departments of Mathematics and Science with which, for several years, the name of Professor Walters was connected. To think of him is to see him again, a splendid soldier-like figure, stand at the end of the room, and, with his arm as radius, sweep magnificent circles on the blackboard. In the other departments where changes were more frequent, the greatest degree of permanence is attached to the name of Professor Macadam in the departments of History, English, and Philosophy and that of the Reverend Charles Tanner, in the department of Modern Languages. In the Faculty of Divinity, those best remembered for length of office were the Reverend Dr. Cook and the Reverend Dr. Love, then minister of St. Andrew's Church.

The College had carried on its work for scarcely thirty years when shadows began to gather. Serious problems in the matter of financing the institution faced its governors, and fears were entertained for its very existence. In 1895, however, the generous bequest of a wealthy citizen of Quebec brought relief and, by means of this, better provision was made for the efficiency and upkeep of the College.

The Principalship had been vacant since the death of Dr. Cook, and the duties of this office were being discharged by Dr. Love, acting as Principal. A Principal was now appointed, the Reverend Donald Macrae, D.D., and the departments of Modern Languages and Science were extended. Under these improved conditions a fresh start was made and reasonable hopes were entertained for the future. These hopes, unfortunately, were not realized, and before long the governors were again faced with the problem of a depleted treasury and a diminishing student enrolment as well. The nearness of McGill, with its wider curriculum, was beginning to tell and Quebecers contemplating a college career chose to attend the University which offered greater advantages than they could secure at home.

By 1900 the authorities of Morrin realized with reluctance the impossibility of holding any longer the position they had striven so hard to attain, and further attempt on their part to keep up the full Arts course seems to have been abandoned. Lectures in special courses were continued for a short time, but by 1902 it was finally decided that circumstances no longer permitted affiliation with McGill. At the same time it was also deemed advisable to discontinue the Theological Courses. With these decisions the existence of Morrin College, as an institution of learning, may be said to have ended.



THE REVEREND JOHN COOK, D.D.

Dr. Cook was the first Principal of Morrin College, Quebec, and the first Moderator of the Presbyterian Church of Canada.

The College building stands today under the old name, looking much as it did in the past. Its Assembly Hall is in frequent use for public gatherings of the Literary and Historical Society and meetings of various patriotic and benevolent organizations of the city. Of its lecture rooms, one contains an extension of the library of the Literary and Historical Association, another the 10,000 volumes of the Aylwin Library belonging to the College. The rooms once used for residence are empty and locked, except for two which have been converted into an office for the Secretary of the Board of Trustees. The present Secretary, Mr. Archibald Laurie, K.C., is a graduate of Morrin.

The College spirit lives on in the men and women whose degrees were won in her halls. In business, law, medicine, scientific research, social service, teaching and the church, the names of her graduates are to be found. Some, having given of their best, have passed on. Others are still actively engaged in their chosen callings. A few have achieved more than ordinary success. It is in their work and whatever of it endures that will be seen the best justification for Morrin's brief existence and the truest fulfillment of her founder's hopes.



MACDONALD COLLEGE: THE MAIN BUILDING

In thirty years Macdonald College has developed from a group of nine farms into an institution holding an outstanding position in the agricultural life of the Dominion.

Macdonald College

By DEAN H. BARTON

THIRTY years ago when a great Canadian philanthropist conceived the idea of an institution for special service to rural folk, the ground on which Macdonald College now stands was in large part a well wooded, stoney area, embracing nine farms. Today, picturesque buildings, a lovely campus, orchards, experimental plots, and large fertile fields replace these ordinary farm lands.

Macdonald College is the embodiment of an ideal cherished by its founder, Sir William Macdonald—the enrichment of rural life. Through her three schools: The School of Agriculture, which is the Faculty of Agriculture of McGill University, The School for Teachers, which is the only Protestant Normal School in the province, and The School of Household Science, the college is contributing to the development of agriculture, the advancement of education, and the improvement of the home.

In the short history of Macdonald many thousands of students have passed through her halls. In the School of Agriculture, to which special reference will be made at this time, instruction in agriculture has been given to over four thousand students, to the majority vocational courses, to a substantial number the four-year course leading to the degree of B.S.A., and to an important minority, graduate work leading to advanced degrees.

It is difficult to follow the careers of the larger number who took the more strictly vocational courses,

but it can be said with certainty that they are to be found farming in many other parts of Canada as well as in Quebec, where the majority are located. It can be said with equal certainty of those in Quebec, that not only has Macdonald College served them individually, but also, through them, she has contributed to the progress of agriculture in this province during the past twenty years.

Macdonald College is justly proud of her graduates. Though comparatively young and limited in numbers, their record reflects the highest credit on their Alma Mater. They have not all returned to the farm as some people expect them to do. Some twenty-five per cent. have agricultural enterprises of their own; the others are employed in professional and technical duties similar to those undertaken by the graduates of other faculties. Some twenty-five per cent. are in the Dominion Service, about ten per cent. are engaged by the different provinces, a number are in Agricultural Commerce, some are in journalism, and a few are in Colonial Service. Mention of some of the positions held by Macdonald graduates may help to indicate the character of their work and the range of opportunity that is open to them. Among the positions may be included:

Deputy Minister of Natural Resources in Nova Scotia;
Commissioner of Agriculture for British Guiana;
Live Stock Commissioner for Saskatchewan;
Chief of the Service des Agronomes for the Province of Quebec;
General Manager of the Canadian Co-operative Wool Growers' Association;
Dominion Apiarist;
Chief of the Dominion Seed Division;
Chief of the Dominion Illustration Farms Division;
Bacon Specialist for Canada;
General Secretary of the Canadian Society of Technical Agriculturists;
Superintendent of the Industrial Training School, Manitoba;
Manager of Insecticides and Fungicides, John Cowan Chemical Company, Montreal;
Professor of Animal Husbandry at the University of Manitoba;
Professor of Animal Pathology at the University of Manitoba;
Professor of Field Husbandry and Plant Biochemistry at the University of Alberta;
Professor of Entomology at Macdonald College;
Professor of Dairying, University of British Columbia;
Business Manager, Committee on Economic Research, Harvard University;
The Provincial Horticulturist, Nova Scotia;
Manager of the Maritime Egg and Poultry Exchange;
Plant Pathologists in charge of Dominion Stations, Nova Scotia, Saskatchewan, and British Columbia;
Entomologists in charge of Dominion Station, Nova Scotia;
Director of Agricultural Education in New Brunswick;
Superintendents of Dominion Experimental Farms in Nova Scotia, Quebec, Saskatchewan, and British Columbia;
Chief assistants to the Dominion Animal Husbandman, the Dominion Cerealist, and the Dominion Horticulturist.

Recognizing the need for more advanced work, Macdonald was the first in Canada to institute graduate work and has to date achieved more in this field than all other institutions in Canada together. Some sixty students have obtained advanced degrees from the University for work done at Macdonald College. Important positions, many of them in research, are occupied by those holding advanced degrees from McGill.

Before the first students arrived at Macdonald College, members of the staff had begun to distribute agricultural information to farm people through what is called Extension work. Prior to that time, the Province of Quebec had seen comparatively little of such service. The information available was greatly needed, it was eagerly received, hence the extension work assumed an importance second only to that of teaching. Through various forms of activity too numerous to mention, and the organized effort that has resulted therefrom, Macdonald College has influenced and helped thousands of farmers in Quebec and other parts of Canada. The co-operative system, under which Canada's wools are marketed, had the way paved for it by pioneer work in wool grading and marketing started in this province by Macdonald College. The Quebec Agronome Service, under which the Provincial Department of Agriculture maintains a representative in each county, was built upon the foundation laid by Macdonald College in the establishment of a system of "district representatives." School Fair work was inaugurated in this province by Macdonald College. The conception of the advanced registry of pure bred dairy cattle, now Dominion wide and being adopted in other countries, had its birth at Macdonald College. The Agronomy Department has taken an important part in the work of the Canadian Seed Growers' Association, and in the Provincial Seed Board, in fact in all provincial activity pertaining to field crops. The production of elite stock seed at the provincial farm has been directed by a representative of the department. The Animal Husbandry Department has done similar work in its field with the Dominion Live Stock Associations, the Provincial Feed Board and various other organizations. The Departments of Horticulture and Poultry have had a large share in the development of fruit and poultry. Recent important activities in the province include the direction of the spray service inaugurated last summer, the first service of the kind in Quebec, and undertaken by the Plant Pathology Department for the Provincial Government; the investigation of the cost of milk production by a committee appointed by the Minister of Agriculture and of which the Professor of Farm Economics was a member; extensive drainage work in Pontiac County, assisted financially by the Provincial Department of Agriculture and organized and supervised by the Agricultural Engineering Department; and the direction of poultry disease and parasite work in the province by the College Veterinarian. Work has been carried on through a multitude of organizations, provincial and Dominion wide, and to practically all the divisions of provincial service in agriculture and to many of the Dominion, the College has made and continues to make substantial contributions.

Despite other activities and the limitations of time and financial resources, Macdonald has not failed to take a place in research. A great deal of useful information has been accumulated through investigational effort, members of the staff have made contributions to the societies and journals of science, superior plants have been developed and distributed, among them the Banner 44 M.C. oat, Quebec 28 corn, Kharkov 22 M.C. wheat and Macdonald rhubarb, all of which are meeting with favour. Banner 44 is the leading improved oat in the Province of Quebec. Quebec 28 corn has been grown quite extensively in the West as well as in the East. Kharkov 22 M.C. is a winter wheat, it is grown successfully in Eastern Ontario, to a small extent in Quebec, and is the best of its kind in Southern Alberta, where a world's record for wheat production has been made with it on the well known Noble Farm. Macdonald Rhubarb is now in great demand for gardens and truck farms in the East, and is extremely popular throughout Western Canada. In addition to these special strains, seed from many tested varieties, plants of many proven types, and superior breeding stock developed at the College in the various breeds of live stock and poultry have been distributed. Important work has been done in maple syrup and maple sugar, in soil problems, in food and dairy problems, in feeding problems, in methods of experimentation, in insect and parasite problems and in genital diseases of animals.

In all three major branches of the College, teaching, extension, and research, special attention has been given during the past five years to revision, readjustment and reorganization in order to make the best use of the resources available and to meet the changed conditions in agriculture, changed in large part because of earlier work of a more elementary character.

Standards have been raised, the courses have been adapted to present requirements and students in increasing numbers are being attracted by the applied work being offered in the third and fourth years.

At present research work is being stressed and a great deal more work of a high order is under way than at any other time in the history of the College. Problems are



MACDONALD COLLEGE: THE SEED LABORATORY IN THE DEPARTMENT OF AGRONOMY

At Macdonald College superior plants have been developed, among them Kharkov 22 M.C., a winter wheat, with which a world's record for production was made on the Noble Farm in Southern Alberta.

being viewed and undertaken where possible on a joint basis rather than as departmental activities, and co-operation between departments that necessarily must co-operate before the problems being dealt with can be successfully attacked, prevails to a marked degree. Soil fertility and animal parasites may be mentioned as two important fields in which Macdonald has recently instituted definite research projects. Both involve basic problems in production, and in both a number of departments must and do participate.

Agriculture's call for help at this time is an urgent one, great changes are taking place, new problems are appearing, old ones are becoming acute, and many branches of the industry are not sufficiently prosperous for the good of the country. Agriculture needs the services of highly trained men, it needs the local leadership of educated men who understand agriculture, and it needs scientific information. A number of institutions and organizations are endeavouring to meet these needs. Many of them are largely provincial in scope. Macdonald, while serving an immediate constituency, is in a unique position to occupy a wider field. That she is capable of doing so is evidenced by the positions held by her graduates throughout Canada, in other parts of the Empire, and in other countries, and also by the cosmopolitan character of her student body. Not a few leading universities today are striving to serve the world's mother industry. McGill, through her Faculty of Agriculture, has an established position in that field of service and, through this faculty, McGill may expect to continue her contributions to the advancement of Agricultural Science.

Dustings from the East Wing Cellar

By T. H. MATTHEWS

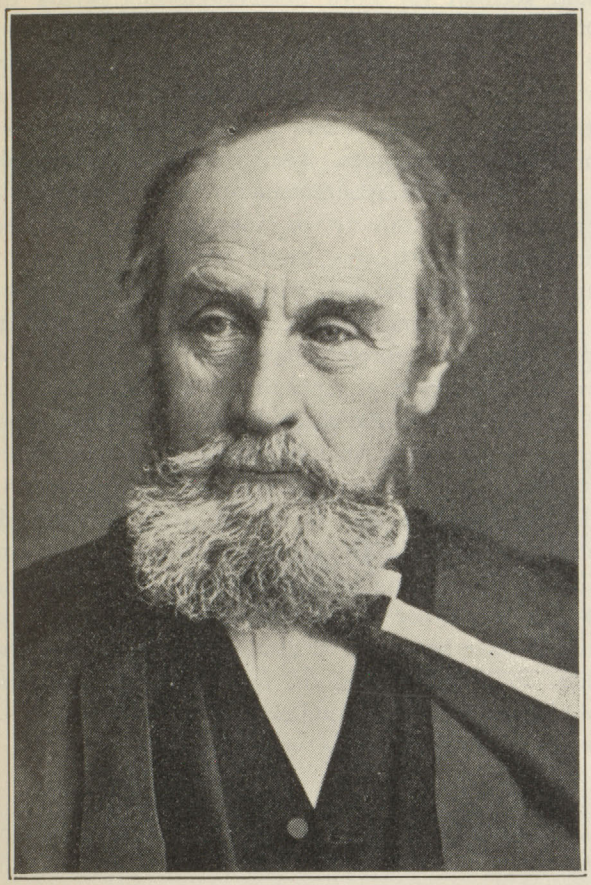
FOR several weeks we have been contemplating a cleaning attack upon our cellar. The vast jumble of dirty, unwanted books down there invited a vigorous attempt to make things more shipshape, whilst there was also the beckoning possibility that stowed away among superfluous recent calendars and examination papers there might be real treasures awaiting discovery. A few days ago, the Superintendent of Buildings came to see me and declared that, in the interests of fire-prevention, the cellar must be house-cleaned, so our expedition was arranged for the following day.

With myself in very old clothes as commander and Dick in clothes still older as chief petty officer, we descended the following morning to find our crew of two, lent by the Superintendent, awaiting us. Feeling the mixed emotions of a zealous housemaid with archæological leanings, I gave the order to commence. Dick and I put on one side, according to plan, the things to be kept, and threw the superfluous items in a large and horribly dusty pile on the floor, whence the crew removed them to a truck. Our crew, after a doubtful start, owing to an argument over some fine point in the technique of porterage, took most kindly to the work. Indeed, but for Dick's intervention, they would in their enthusiasm have removed the University's complete stock of unused examination books.

It was a very dusty form of exercise, hard on the nose and throat, but refreshingly unacademic, and relieved by the occasional visits of friends from above. The first day we threw out just under two tons of printed matter and would have thrown out more but for the Tutankhamen Tomb element that now and then interrupted the Commander's weight-putting zeal.

Here, among some hundreds of matriculation papers for 1908, was a dusty little yellow booklet of thirty-four pages, entitled "Prospectus of the University of McGill College, Montreal, 1857-'8." Opening this at the fourth page, I tried to visualize my predecessor, Mr. William Craig Baynes, B.A., McGill's Secretary, Registrar, and Bursar, whose office was in Burnside Hall, where he stated, he might be found "from 10 to 2 every lawful day". What sort of form, I wondered, did a student fill up in Mr. Baynes' office if he were registering, perhaps, for Professor Sutherland's lectures in Inorganic Chemistry (I was now at page 13). This course was given every day except Saturday from 7 to 8 p.m., and was exceedingly comprehensive "comprising" stated the prospectus "Heat, Light, Electricity, Galvanism, Crystallography" and much more, and ending with "the Metals, their combinations and modes of extraction from the ores and applications in the arts." Dr. Sutherland, it seems, had a harder life than Mr. Baynes and, since his degree was a McGill M.D. of 1836, and his house in the fashionable Great St. James Street, I expect he practised medicine before that daily seven o'clock lecture, but not too often, I hope, after it.

A little later, Dick came across the stubs of a very small Bank of Montreal cheque book of a still earlier date, with the counterfoil of a cheque for £6 2s. 6d. for "three cords of wood and sawing for McGill College", bought by Mr. Baynes, perhaps to keep the boarders warm, for in those days, said my Prospectus, "a limited numbers of boarders will be received into the families of the resident professors;—terms £50 per annum." A University balance sheet for 1875, which we found later, convinced me that those fifty pounds must have been very welcome to the under-paid professors.



SIR WILLIAM DAWSON

Principal of the University from 1855 to 1893

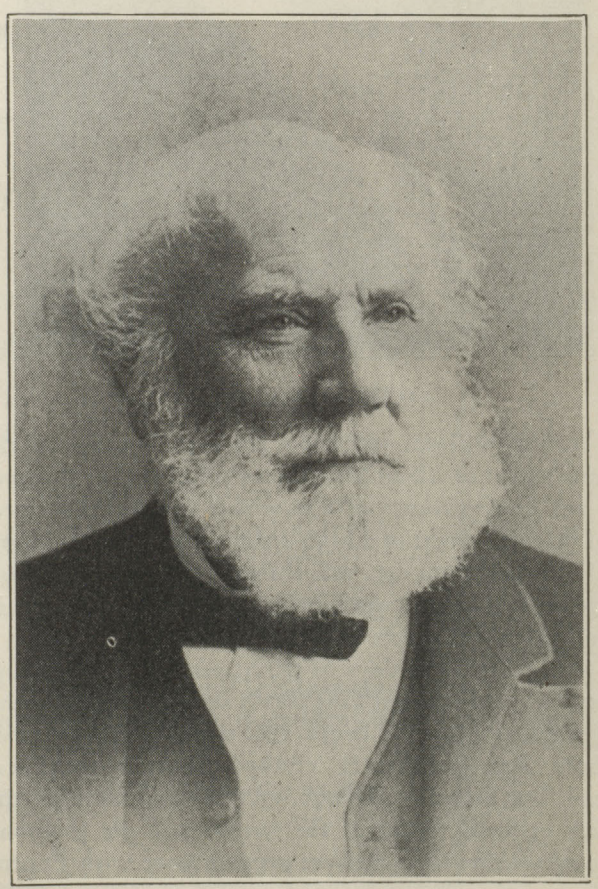
The first item on the disbursements side of this balance sheet read: "Administration (*viz.*, salaries)—Principal, Secretary, Clerk, Librarian and Porters, $4,465.00, and I felt that those pleasant office hours of Mr. Baynes, twenty years earlier, were more than justified. Chemicals and apparatus for Prof. Sutherland's successor cost but $13.75, but Physics was better served, for there was an item "Philosophical Apparatus $336.25". The Gymnasium, on University Street near Burnside Hall (no longer inhabited by Mr. Baynes, who now lived in McGill College), received $223.00.

The next interlude from dusting and discarding came with an account of the proceedings of the Annual Convocation held on Thursday the 2nd and Friday the 3rd of May, 1867. This date naturally caught my eye, and the booklet had to be glanced at before it was replaced upon the shelves. Convocation at that time was mainly oratory, and oratory, I thought, of a high order, in the grand Johnsonian manner. On the first day there were five B.A.'s and three orations; on the second there were fifty-two degrees in Medicine and Law and five speeches.

The only speech that made more than a passing reference to the impending Confederation was that of the Principal, Dr. Dawson, who, on the first day, spoke at length and with what I thought admirable sense, on the educational aspects of Confederation and the problems of the Protestant minority in Lower Canada. "It is much to be regretted," he said, "that the framers of this bill had not the courage to place all matters relating to University powers and privileges in the hands of the General Government and Legislature. . . All our Universities should have been British American in the strictest sense, all their degrees of national value, all laws relating to the standard and legal estimation of those degrees of national extent." McGill, apparently, had strongly urged this view by petition and otherwise, but without effect.

A little later, in these same proceedings, there was evidence of a first-class row between Kingston and McGill. The President of the Medical School at Kingston, who was also President of the Medical Council of Upper Canada, had a fine flair for abuse. Here is his opinion of the McGill Medical Faculty expressed at Kingston in a public speech and quoted at this Convocation. "They dreaded that the regulations of the Council would have thinned their classes by diminishing the number of students, and that consequently the revenue which they derive from the manufacture and sale of Degrees would be wonderfully curtailed." Apparently

(*Continued on page 35*



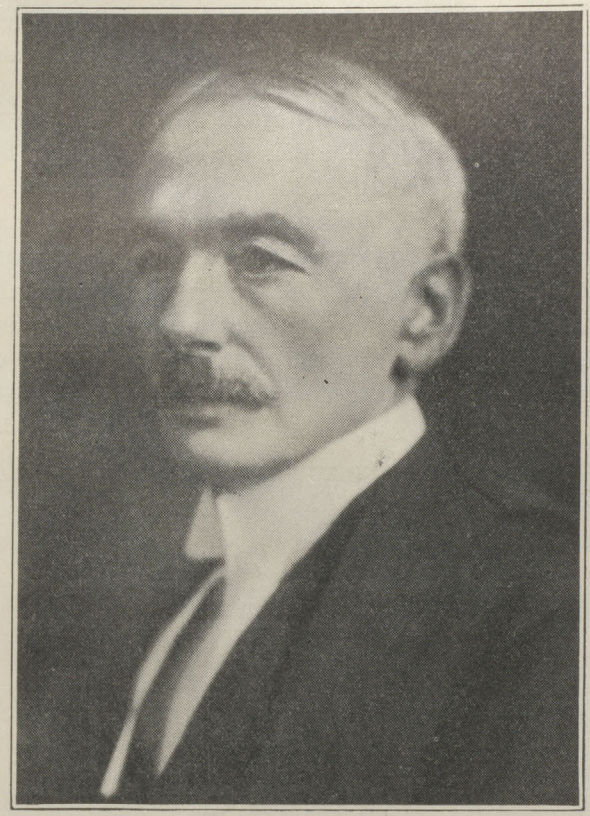
WILLIAM CRAIG BAYNES, B.A.

Who, in the period of Sir William Dawson's principalship, served for many years as Secretary, Registrar, and Bursar of the University.

Eugène Lafleur

1856-1930

NOT, perhaps, in a generation has the passing of a private citizen of the Dominion evoked such widespread expression of sorrow as followed the death of Eugène Lafleur, K.C., Arts '77, Law '80, LL.D. '21, which took place in Ottawa on the evening of April 29th.



EUGENE LAFLEUR, K.C.

Almost without exception, the great journals of the country printed editorials, commenting with deep regret on the disappearance of one whose professional career had reflected credit of a high order on McGill, on Montreal, on the Dominion, and, through the unusual ability displayed in appearances before the Privy Council in England, on the whole British Empire.

Since those first days of public sorrow, the weekly, monthly, and quarterly journals of the country have appeared, and in their pages, too, tribute has been paid, tribute less abundantly clothed with biographical detail, but deeper in feeling and affection, through the warm personal regard of the writers and the profound respect which more intimate acquaintance with Eugène Lafleur and more complete knowledge of his labours would seem unfailingly to have inspired.

Perhaps the outstanding qualities of Mr. Lafleur's life were, as suggested by a tribute in the Montreal *Standard*, "intelligence, industry, and character." These would account for Lord MacNaughton's saying that "Of all the overseas counsel coming to plead cases before the Judicial Committee of the Privy Council, Mr. Lafleur has the clearest and most judicial mind," but they would not explain the regard and affection of Mr. Lafleur's comrades and colleagues. Their regard was commanded by his professional attainments and his standing as an acknowledged authority on international law; their affection, it seems, was based on those qualities of simplicity and gentleness, which, even in the hours of his triumphs, never forsook him. As one writer has said: "Whether before the Superior Court of his own Province, the Court of Appeals, or the Supreme Court of Canada, he was the same kindly gentleman, never losing dignity in the heat of pleading, though able to parry the thrusts of his opponents swiftly and clearly."

In the *Canadian Bar Review* for June, Francis McLennan, Law '84, LL.D. '21, pays tribute to these same qualities. Concluding an appreciation, Mr. McLennan says: "It is a glory to our Bar to have deserved such words as have been said of him, and a fresh proof that honour and courtesy and the love of letters command, as of old, deference and good will."

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Boat Race on the Lachine Canal

If plans of the McGill Rowing Club materialize, the first two-mile intercollegiate boat race in Canadian history will provide an interesting spectacle for thousands of people.

The race is taking place on October 4th, after the rugby match between McGill and R.M.C. To make a sporting afternoon, it has been announced that chartered busses will be at the stadium after the game to take the crowds down to the Lachine Canal at Côte St. Paul, where the race will be rowed. Private bus parties are being arranged, and all busses will follow the eights from start to finish before taking their parties home. This is the first time in Canada that spectators will be enabled to follow a rowing race in this manner.

Mr. Walter M. Stewart, Honorary President of the McGill Club, has taken keen interest in this year's competition between McGill and Varsity. The use of the Lachine Canal has been granted by Colonel Dubuc and Mr. Pariseau of the Department of Railways and Canals, with the co-operation of the Dominion Marine Association obtained through Mr. W. Enderby and Mr. Francis King. The thanks of rowing enthusiasts are due to these gentlemen for making possible what it is hoped will become an annual event.

Reservations may be obtained through the office of the Athletic Manager in the McGill Union.

SUPPLEMENT

TO

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* * *

OUR CONTRIBUTORS

COLONEL WILFRID BOVEY is Director of Extra-Mural Relations in the University of McGill.

THE RIGHT HON. MR. JUSTICE L. P. DUFF, P.C., is a member of the Supreme Court of Canada. He received the Honorary Degree of LL.D. from McGill University last May.

E. A. FORSEY is a Lecturer in the Department of Economics, McGill University.

and all whose hopes were centred in the deciphering of some page in the great book of nature. We cannot hope to fill our universities with Newtons or Maxwells or Faradays or Rutherfords, but the science of the true university will be inspired with a lofty intellectual spirit and informed by disinterested love of truth. It would, as Mr. Balfour's phrase implies, be a grave error to imagine today a science unapproachable, taking refuge in the precincts of a sacred temple; science, in the deepest recesses of her laboratories, is engaged in a labour for the behoof of humanity, and so, without ceasing to answer to the most disinterested needs of the human spirit, she enters into contact with the immediate and positive interests of humanity; and science indeed has been most productive even in the narrow sense when pursued without any thought of immediate practical gain; though, in the long vista, she looks forth upon a world transformed and transfigured through the devotion and the toil of her sons.

I hope I shall not be misunderstood. Of course, we are fundamentally concerned with the question—it is the question—How does the University affect the imagination, the character, the ideals of those who come under its influence? It used to be said that education is that which remains after everything which has been learned has been forgotten; and more important than imparting knowledge is the gift of the keys of knowledge, of those intellectual methods by which knowledge may be acquired. And I think the friends of this great University would find their greatest satisfaction in the assurance that the University had attained some measurable success in imparting to those whom it has sent forth into the world some heartfelt appreciation of the truth that the real greatness both of man and of human societies has its roots in probity, honour, the capacity for self-sacrifice, the subordination to high ideals; that from these spring not only the grace and the beauty of life, but material power as well.

Let me here express once more in simple and quite inadequate words the pride I feel in being enrolled among the Alumni of this great institution who so many years ago attained so high a degree of efficiency as to set her own peculiar stamp upon her sons, and whose degree—without offence I may perhaps particularize medicine and engineering—have made them free the world over of that great company whose standard of excellence is nothing short of the highest. Sir William Dawson, in, I think, his last speech to the University, said the time has come when McGill should regard herself not as belonging to Montreal or to Quebec, but to Canada as a whole. Nobly has McGill fulfilled and more than fulfilled that hope.

It has seemed to me that I must pass to another theme. I should consider very briefly—time does not tolerate anything like an adequate discussion—a subject which appears to be a pressing one, one of immediate importance to all of us, and especially to the universities. I am referring to the great change, the great expansion that has taken place within the last few years in the political relation and the political activities of this country.

The War brought to culmination the development of three generations and enormously enlarged the field of political activity. That field, which was once local, has become world wide. The political interdependence of nations confronts us now not as an accepted theory only, but as a fact which must daily be taken into account. The minds of people of my generation do not

easily make the necessary adjustments, our tendency is to continue as in the old way of pre-war days; yet it is accepted as a commonplace among statesmen competent and wise enough to give their minds to the new situation, that we must banish the old habits of political thinking and face with fresh intelligence and fresh interest new and infinitely more complicated problems.

"There never was a time when the various peoples of the world were brought into closer contact with each other. All through the modern era the nations have been getting closer together from the point of view of trade, of manufactures and of industry. Steadily a certain kind of intercourse has been made easier and easier by the facilities provided by railways, steamers, and I suppose I ought to add, by aeroplanes.

But after all, these things do not bring you into close touch with the temperament, the psychology, the passions, the ambitions of your neighbours in other lands. It is another matter altogether to be brought, as we have been of recent years, into direct contact, sometimes into direct conflict, with nations of a different upbringing, a different history, a different psychology from ourselves. That is a new development forced not merely upon the statesmen, but the peoples of the various countries of Europe. Whether we like it or not, we are brought into immediate contact with each other. That is the destiny to which we are forced by circumstances. Like the members of the same family, we have got to live together. The members of a family may live together in peace and amity, mutual understanding and mutual good will, or they may quarrel, they may render life intolerable by their bickerings, they may render intercourse a source of endless pain and perplexity, instead of it being, as it ought to be, one of the greatest sources of mutual pleasure and satisfaction. "After all, the world must depend on mutual charity, and mutual charity must depend upon mutual comprehension, and therefore I say that what we desire in international relations, the policy that we desire to see carried out, must, if it is to be successful, depend in the long run upon the nations learning to understand each other." In these words Mr. Balfour has indicated the idea I am seeking to convey.

The readjustment cannot be accomplished by the unaided efforts of statesmen. We ought not to forget that the statesmen of our time have provided us with a great political international instrument in the League of Nations. It is not what its authors had designed it to be, largely perhaps because of the absence of the United States from its councils, but even within the sphere in which the League itself operates, the statesmen who represent their respective countries at its Board are each in their several places answerable to a public opinion, a national public opinion, mainly formed by public discussion; and it must be obvious that the prospects of an ultimate success depend in great measure upon the degree in which such discussion and such opinion are informed by intelligence and knowledge. For my own part, I do not hesitate to say that if the League of Nations fails, it will be because in face of the changed conditions of humanity the peoples of the world have remained blind because they have refused to make the necessary effort to understand. Burke, after inveighing with all his power against the French Revolution and all its works and ways, declares that "if this great change is to come about in human affairs, then the minds of men will be led up to it so that it shall seem

to have come upon us in the order of Providence rather than as a work of human hands." In point of historical fact, the minds of men had long been prepared for the French Revolution, and other great revolutionary changes of world wide significance and effect were all preceded by generations of preparatory intellectual movement.

For the League of Nations and the order of ideas for which it stands there was no such long preparatory training, and thus, in spite of the active, earnest interest of leading statesmen, the minds of the peoples throughout the world are still given to the old habit of looking upon international affairs as a region in which things take their own course and drift along in obedience to some mysterious meteorological tendency over which human beings have little or no control. We are accustomed, it is true, to a multiplicity of professions expressed with perfect sincerity and lofty phrase, but the value of these is not considerable, and we shall do well not to be misled by them; what is needed is a new birth of political thinking among the peoples themselves.

There is hardly any country to which this applies with quite the same force as to Canada. The relations between the Dominions and the Mother Country have now been generally recognized to be those necessary to equality of status; equal status demands something approaching equality of responsibility, though allowance must of course be made for difference of function and for difference of capacity. Nobody thinks of strict arithmetical parity in all respects, but the situation involves a degree of responsibility and a degree of actual participation in foreign affairs, not dreamed of before the War. It involves intra-Imperial relations between co-equal states, owning a common Sovereign, of a kind entirely novel.

In regard to all of these things we have had virtually no experience and we have hardly the beginnings of a political equipment. How vast the general ignorance is may be realized by any one who tests by inquiry among even intelligent people their knowledge of the facts touching, for example, the interallied debts; the origin of these debts, the peculiar position of Great Britain; the respective attitudes of Great Britain, the United States and France in respect of the payment of them. Indeed, in this country, for reasons it is difficult to comprehend, there is apparent, to any close observer, a singular absence of interest touching questions affecting our own constitution and our own intra-Imperial relations. That state of mind arises, I believe, very largely from absence of knowledge. Whatever its cause, it is a disturbing symptom. There are those who predict the disappearance of democracy as a political system. Some base that view upon the unwillingness of the elite, men of unusual intelligence and ability, to endure the annoyances and humiliations which attend a career in formal politics in a democratic country; others upon the incapacity of the mass of voters to comprehend the elements of an important problem in politics or their indisposition to face the truth about public affairs. I do not believe in these predictions. Every generation has had its crop of them. But if democracy—a system founded upon public opinion produced by public discussion—is to be maintained in the new era, then it is, as Mr. Baldwin has said, upon the condition that "the people as a whole shall be determined to make the community better, stronger and freer."

It is, however, with the international sphere that I am for the moment immediately concerned, and the question I put to myself in view of the considerations which I have only very rapidly and very summarily sketched is this. Are we proceeding with the earnestness and energy necessary, first, to bring about in the minds of the public an appreciation of the fact that this great change has come over the sphere of politics and, second, are we applying our minds with the necessary earnestness to the education of the public, the adult public, in the actual facts affecting the international situation? This, it seems to me, is primarily work which ought to engage the attention of men engaged in political life. But it is a work to which all who have opportunities of intellectual leadership should make their contribution; the Press, the Universities in their characters of intellectual leaders. That branch of the subject I leave there.

It is the other branch which is the core of my thesis, upon which I do not intend to speak at length because in detail many others in this country are competent to speak where I am hopelessly incompetent. The necessary result of what I have said is that your system of education, from its first to its last stage, ought to be accompanied by consciously directed efforts to produce a people capable easily of embracing the international point of view, and equipped also, with such knowledge, historical, geographical, economic as will enable them to follow the discussion of the international problems of statesmanship. The responsibility primarily rests with the Universities. The Universities stand at the head of our educational system, and from them flow the intellectual streams to irrigate the plains where men do their varied tasks. Let me not be misunderstood, I have undertaken in a summary and concise way the discussion of a great subject, and there is little time for qualifications, necessary, perhaps, to prevent misunderstanding. The creation of a super-State of which all other States are dependencies has at times been dreamed by dreamers, but it is no part of the aspirations of those who are today engaged in the attempt to organize international affairs, in such a way as to bring a reign of peace upon earth; at all events, it is no part of the aspirations of the statesmen who in the international sphere represent the world of the English speaking peoples; whatever may be done with others, we cannot be governed in that way.

I have said that it would be presumptuous for me to put forward concrete suggestions in relation to this matter, which I believe to be both important and pressing, but there is one region in relation to which I may be permitted one word. Our new status, if we are not to fail in the duties incident to it, demands for our service a corps of trained diplomatists and trained international lawyers. The old English tradition which traces Whitehall back to the older universities will I hope, nay, I am confident, be maintained in this country, and a great opportunity as well as a great burden will thereby be presented to the universities themselves. As to international law, I may speak with perfect freedom here. It is commonly said that the international lawyer is, unfortunately, never a lawyer, and I fear this sneer is barbed with truth; but of this we may all be confident, that no international lawyer who has received the imprimatur of McGill will fall under the stroke of that sneer. Mr. Vice-Chancellor, this country has lately suffered a great loss in the death of one of the most distinguished graduates of McGill, the leader of the

bar of Canada, one of the great advocates of the Empire, one who, without the slightest affectation or exaggeration,can be said to have taken his place in the long line from Oliver St. John to John Simon and who in his person illustrated those endowments which belong to the ideal international lawyer and to the ideal diplomatist. Nay, Mr. Vice-Chancellor, if I were to search for a person embodying in himself, as far as imperfect human nature can permit, those qualities, intellectual and moral, which a University like McGill seeks to impart to its students, my mind would inevitably revert to the great name of Eugène Lafleur. His fame at the centre of the Empire was not less than his fame in the city of his birth; and the respect, admiration and affection of those who had known him from early manhood was not greater than the respect, admiration and affection of the legal profession in every part, without exception, of this wide Dominion.

Canada's Foreign Trade*

By

E. A. FORSEY

DR. LAUREYS could hardly have chosen a better year to issue the English edition of his "La Conquête des Marchés extérieurs." The layman in such matters, bewildered by Mr. Dunning's "numerous and complex" fiscal changes, and faced with the possibility of still more important developments as a result of the election and the Imperial Economic Conference, will grasp eagerly at the help which an expert's book on Canada's foreign trade would seem to offer. Preface and foreword will confirm his hopes. Dr. Innis, after outlining several of Canada's most important economic problems, assures us that "Dr. Laureys has suggested a key which promises to some extent to solve" all of them. Dr. Leacock in his preface refrains from touching on "the intricate questions which arise as to export prices and home prices, export balances and the exchanges," because "the reader may safely be left to the competent guidance of Dr. Laureys."

Perhaps; but he will find no such guidance here. The "intricate questions" referred to are left severely alone; and the "some extent" to which Dr. Laureys has solved our economic problems is modest indeed. He has contented himself with a very brief and inadequate treatment of the general principles of international trade, an analysis of our trade balance in 1928—needlessly detailed and sometimes seriously misleading—and over two hundred pages describing what Canada and other countries have done to develop foreign trade by specialized sales and credit organization and by publicity. This descriptive material no doubt forms a useful reference work. But if that is its aim, the book is both too long and too pretentious, and the elaborate puffs of its sponsors are quite out of place. Dr. Laureys has only his friends to thank if he finds himself judged by rather exacting standards.

To be sure, Canadian public opinion on the subject of foreign trade is in a state of primitive innocence in which it can ill afford to despise even mere information, and of that, for one part of the subject, Dr. Laureys has given it full measure. But what we need still more than information is analysis; not simply facts, neatly arranged, but critical examination of the facts and reasoned discussion of policy. Dr. Laureys on the whole has fought shy of all this. His rare excursions into the realm of theory are worthy of the average Canadian political platform.

His main thesis is "the necessity and indeed the urgency of developing our export trade in manufactured products . . . The problem that confronts us," he declares, "may be stated quite simply. Shall we create and develop industries, transforming here in Canada the larger part of the raw material of

*The Foreign Trade of Canada: by Henry Laureys: translated from the French by H. A. Innis and Alexander H. Smith; with a preface by Stephen Leacock. pp. xvi and 325. Toronto: The Macmillan Company of Canada Limited. $2.50.

our forests and mines, and then attempt to sell abroad the surplus of these manufactured products? Or . . . shall we remain inactive, letting others purchase these materials from us, or worse still, allowing them to come here and manufacture goods in Canada for their own profit?" (p. 75). This illustrates perfectly his book's chief weaknesses: its uncriticized assumption that industrialization is always advantageous, its flavour of the categorical imperative, its lack of quantitative analysis. Dr. Laureys apparently is so oppressed by a sense of moral inferiority because our export trade is largely in raw materials and because we depend to some extent on foreign capital and foreign merchandizing, that he does not stop to consider possible reasons for this state of affairs. It seems never to have occurred to him, for example, that perhaps we export our materials in the raw because it is worth our while to do so. The rancher who sends his raw hides to a factory at the other side of the world, and imports his shoes, does so as a rule not because he is a low fellow, too mean-spirited to build a shoe factory, but because it pays him better to specialize in ranching. Are we quite certain that for some lines of production Canada is not in just this position? Dr. Laureys wants us to manufacture our raw materials at home. But he makes no attempt to prove that it would be a sound business proposition. He is satisfied to rest his case on an assumed moral superiority of manufacturing over other occupations. I wonder how many business men make their investments on that principle?

Of course government is not business. We cannot frame national policy solely in terms of dollars and cents. Moral considerations may justify the most drastic political intervention in business. But before we attempt any further intervention of this kind we ought to make reasonably sure that our morality is valid, and that we realize the economic consequences of our action. Canadian governments for the last fifty-two years have done neither. They have assumed without question that there is something peculiarly ennobling in a factory chimney, and have deluded themselves into a belief that every essay in Protection, regardless of circumstances, must be profitable to the nation. We have quite enough of this mischievous nonsense in our heads already without Dr. Laureys goading us on to fresh excesses.

Would it necessarily pay Canada to manufacture at home the raw materials she now exports, and export the finished product instead? It might easily pay some Canadian manufacturers extremely well; but that is hardly the same thing, though the two are often confused. The effects of Dr. Laureys' policy on the nation would vary with circumstances, and may perhaps best be understood by considering a few hypothetical cases.

1. Canada has a monopoly of a particular raw material.

(*a*) The physical and technical factors necessary to transform this material into the finished product—such things as power, labour, transport, and capital goods—are at least as cheap in Canada as abroad, and both raw material and finished product enter the foreign market duty free. Under these conditions, an embargo on the export of the raw material, an export duty high enough to force the finishing industry into Canada, or a bounty to Canadian finishing plants sufficient to enable them to eliminate their foreign

competitors, will be good business for the nation; *provided* the encouragement of this finishing industry

(α) does not withdraw productive resources from other industries in which Canada possesses a still greater advantage over foreign countries than she has in this industry;

(β) does not lead to the development of substitutes for the finished product;

(γ) does not provoke foreign retaliation serious enough to counterbalance what has been gained.

One cannot play the highwayman in international trade without running some risks, and Canada's dependence on foreign markets makes her particularly vulnerable.

(*b*) The physical factors cost more in Canada than abroad, and both raw material and finished product enter the foreign market duty free. Under these conditions, if the demand for the finished product is such that the increase in price will not reduce the net return to the extractive industry by an amount equal to the net return to the finishing industry less any loss to the Canadian consumer from higher prices or the cost of bounties, an embargo, export duty, or bounty as above will produce a net gain to the nation subject to provisos (α), (β), and (γ).

(*c*) The physical factors are at least as cheap in Canada as abroad, and the raw material enters the foreign market duty free; but the finished product pays duty. Under these conditions, an embargo, export duty, or bounty as above will benefit Canada only if the demand is as in (*b*), and subject to the same provisos.

II. Canada has no monopoly of the raw material, but only an advantage in cheapness.

(*A*) Under the conditions set forth in I(*a*) a temporary bounty to the Canadian finishing industry will benefit the nation unless it depresses the price sufficiently that the net return to the extractive industry plus the cost of bounties is equal to the net return to the finishing industry; subject to provisos (α), (β), (γ), and a further proviso (δ) that the foreign finishing industry is not so strongly entrenched as to be able to hold its markets against us indefinitely. "Long run" considerations are all very fine; but it is well to remember Mr. Keynes' warning: "In the long run we shall probably all be dead."

(*B*) The physical factors cost just enough more in Canada to balance the cheaper raw material, and both raw material and finished product enter the foreign market duty free. The effects will be as in (*A*).

(*C*) The physical factors cost more in Canada than abroad to a degree more than sufficient to balance the cheaper raw material, and both raw material and finished product enter the foreign market duty free. Here a bounty to the finishing industry will not pay the nation.

(*D*) The physical factors are as in (*A*), the raw material enters the foreign market duty free, but the finished product pays duty. Here a bounty to the finishing industry will not pay the nation, unless the cheapness of the physical factors is sufficient to counterbalance the foreign import duty, and then only subject to provisos (α), (β), (γ), and (δ).

How much room do these principles leave for the application of Dr. Laureys' theory?

These hypothetical cases are, of course, very loosely stated. An adequate book on Canada's foreign trade would elaborate them at some length and make an attempt to apply the theoretical conclusions to specific industries. Dr. Laureys does neither. He does not even hint that his dogma may be modified by circumstances. Most remarkable of all, though he declares that the development of an export trade in manufactured products is of pressing urgency, he gives us not the faintest notion of the means by which he would achieve his end. The whole question of the export of electric power, for example, is passed over in silence.

The use of foreign capital in developing our resources comes in for much the same sort of treatment. Dr. Laureys views with pious horror the prospect of "others" coming here to "manufacture goods in Canada for their own profit." But he explains neither why nor how foreign capital is to be kept out, nor what will happen if it is. This last omission is not very surprising, for the most obvious result would be to slow down the industrialization he so ardently desires. But that only makes it the more extraordinary that he should tell us nothing of the compensating benefits we are to gain by banging the door against the foreign investor. Presumably he is anxious to avoid the disagreeable necessity of making interest and sinking fund payments abroad. Perhaps also he shares the common fear that Canada will go the way of the smaller Central American republics: that the industrial domination of United States capital will lead to political domination.

Bald generalizations of this kind, however, get us nowhere. Rational discussion of economic problems demands quantitative thinking, the weighing of one factor against others. How fast do we wish to industrialize? How much capital do we need to do it? How far can we supply our own capital requirements at current interest rates? If our present domestic savings are inadequate, what interest rate would produce enough to allow us to dispense with foreign capital? Would the cost be less than that involved by borrowing abroad? If there really is any prospect of such a rush of external capital to Canada as Dr. Laureys envisages, these questions are surely relevant. But as a matter of fact there is not. According to the Dominion Bureau of Statistics, Canada now has in normal years a net *export* of capital.

That fact alone disposes pretty thoroughly of the fear of increased political domination by foreign capitalists. But in view of the widespread impression that United States millionaires already have us safely in their pockets, it is perhaps worth while to quote the Bureau of Statistics again. Its estimates are admittedly not perfect; but they are the best we can get, and they give a fairly accurate outline of the situation. The latest figures show that total external investments in Canada amount at most to about one-quarter of our national wealth, and that Canadians "own from 55% to 65% of all enterprises located on Canadian soil." External capital controls only one major

group of industries, pulp and paper and lumber, in which its holdings form about 56% of the total. In mining, the external holding is about 48½%, in railways 41½%, in no other group does it rise much above one-third.

On his own special phase of foreign trade, the technique of marketing, Dr. Laureys is more informative but hardly more illuminating. This part of the book—and it makes up over two-thirds of the whole—is almost undiluted description. Mingled with this is a certain number of homilies on how to please the customer, useful enough, perhaps, but not, one fancies, very new to the business men for whom they are presumably intended. When it comes to pointing the moral of his tale, showing how far Canada can apply the schemes in use abroad which he has been describing, Dr. Laureys has virtually nothing to say. "It will be sufficient," he assures us, "if we adapt to the needs of our own country the methods which for so many years have been tested elsewhere and found successful." But it is just here that Dr. Laureys' expert opinion is most needed and might be most valuable. What he could do if he chose he proves by the admirable, if brief, discussion of foreign trade cartels on pages 130-131. What he can overlook when he wants to we discover from an astonishing footnote on page 78: "This book is obviously not concerned with cereals, which are sold easily and are sought after by foreign countries. Our markets are always the same and the sale of these goods requires no special efforts on our part." Has Dr. Laureys ever heard of the wheat pools?

Elsewhere he is not very explicit, but it is clear that he believes Canadian industry should build up an elaborate specialized export organization, and try to develop more direct trade with countries other than Britain and the United States, instead of allowing those nations to do a good deal of marketing for us. But here again he does not always reason quantitatively and sometimes neglects the time factor. He recognizes, indeed (p. 92), that specialized export organization is "rather costly." In the case of banking he admits (p. 151) that "we must not be in too great a hurry. Special banks for export trade must not be developed in this country regardless of the demands of trade." But it hardly seems to dawn on him that this principle has a wider application. He does well to point out the value to a great exporting country of having a trained export personnel with specialized knowledge of foreign markets. He does better when he reminds us that the development of such a personnel takes time, and that we should make a beginning now. No doubt, too, as he suggests more than once, Canadian manufacturers have often been lacking in imagination as regards foreign trade. In a Protectionist country that is not surprising. But is it fair to imply that this is the principal reason why we have no such enormous export organization as certain other countries? After all, we have to consider "what the traffic will bear." A manufacturer who has only a small amount of foreign business may be unable to afford a special export department. Canadian business as a whole, doing only a small trade with Portugal, let us say, might be well advised to do it through established English channels rather than direct. The disadvantages of these methods which Dr. Laureys cites are real, but they are not necessarily decisive. He himself is, of course, perfectly aware of all this, but I am afraid he flatters the Canadian public in assuming that they are equally aware of it and will not misunderstand him.

One further point. We might have expected Dr. Laureys to give us some idea as to which goods we have the best chance of exporting, and to what countries. All we get, however, is a commendation of the policy of trade treaties (p. 311) and these two blinding glimpses of the obvious (pp. 80-81): "There is nothing to prevent us from selling our goods in England, Germany, France, Belgium or elsewhere when it is possible"; and "Where quality and price are equivalent we can sell to Rumania, Argentina, or the Orient on the same basis if not better than (sic) our neighbour to the South."

A few other gems of unconscious humour and some minor errors are worth quoting at this stage. On page 58 Dr. Laureys solemnly declares that "In the interests of the Dominion as a whole and of the agricultural classes in particular, the great mass of our Canadian population should limit its consumption [of fruit] as far as possible to fruits in season, and leave early and exotic fruits imported from abroad to the wealthier classes." There is an unpleasant touch of snobbery about this; but the statement on page 46 that in Canada "workmen must be paid the high wages exacted by the international unions" is merely funny—at least to those who know the ludicrous weakness of trade unionism on this continent. Other *obiter dicta* are less amusing. On page 43 we are told that central Canada imports coal because the coal fields of Nova Scotia are "inadequate." The real reason, as every schoolboy ought to know, is that, though amply sufficient in quantity and fairly satisfactory in quality, Nova Scotia coal is too far away from Ontario at least to be of much use there. Dr. Laureys also asserts (p. 48), on what authority I know not, that Ontario steel plants use *both* American and *Canadian* coal. A footnote on page 37 conveys the novel information that the cod fishery on the Grand Banks of Newfoundland is "carried on by fleets of French fishing vessels." If Dr. Laureys ever visits Newfoundland, he had better go cased in quadruple steel and armed to the teeth.

These are matters of detail, but the count of Dr. Laureys' major sins of omission and commission is by no means complete. He warns us (p. 8) that "it is an exaggeration to measure the economic activity of a nation by its foreign trade per head," and he reproves the Dominion Bureau of Statistics for "classifying countries on the basis of their external trade *per capita*. Other countries considerably more developed economically than Canada are placed far below her. It is obvious that classification of this sort leads to confusion. In the case of Canada, the volume and value of whose exports depend in great measure on the success of the harvests, these figures vary considerably from year to year" (page 9). The reproof is, of course, entirely beside the point. The Bureau does *not* "classify countries on the basis of their external trade *per capita*," any more than on the basis of their production of crude nickel *per capita*. It does publish tables showing that Canada is the world's greatest producer of crude nickel, and that in *per capita* foreign trade she ranks sixth in the world. That is an altogether different thing. There is no attempt to use the figures as an index of economic development, and to read into them any such intention is quite gratuitous. It would be inconceivably stupid to suggest that because Canada's foreign trade *per capita* is three times as large as that of the United States, therefore Canada is more mature economically than the United States. But it is perfectly sensible to conclude from these figures that foreign trade is of much greater importance to Cana-

dians than to Americans, that the United States is more self-sufficing than Canada. Dr. Laureys should be the last to cavil at statistics which emphasize our dependence on foreign trade; more especially since in flat defiance of his own warning, the concluding words of his book are these: "The fairest gauge of a nation's commercial welfare and progress is the extent of its foreign trade." (p. 313).

Of course these particular statistics do not give us a complete picture of the economic life of the nation. They are not meant to. They merely bring one large factor in that life into bold relief. Other tables go on to amplify and explain, and it is quite open to Dr. Laureys to go still farther. For instance, he might well have attempted to estimate the relative importance to Canada of internal and external trade. Figures are available for this purpose, though they are by no means as full as we could wish. But Dr. Laureys does not even refer to them. Similarly, when he comes to describe the growth of our foreign trade, general and particular, he points out (p. 21) that "we must.. take into account changes in value since the War"; but he is content to give the crude figures in dollars without any adjustment to allow for changed purchasing power. The index number of prices of goods entering into foreign trade, compiled by the Dominion Bureau of Statistics, is not even mentioned.

As for trade policy it would be hard to find any utterances from a responsible economist feebler or more meagre than Dr. Laureys'. He deliberately avoids "entering into a detailed discussion of the two theories on which all states base their commercial policies." (p. 9). Why? Has fiscal policy no significance for foreign trade? Would the abolition of the Canadian tariff be a matter of indifference to our importers and exporters? "It is evident," according to Dr. Laureys, "that Canada should to a reasonable extent protect her industries by a customs barrier wisely applied to each product. All new countries on the road to industrialization are in this position." (p. 13). But is it evident? What is "a reasonable extent?" What does "wisely applied" mean? Which products should be protected? "Our industries," he goes on (p. 14), "can export only if they are not too highly protected." Why only then? Does Protection hinder exports, and if so, how? How much is "too highly?" To these questions Dr. Laureys has apparently no answer. "It cannot be maintained," he declares, "that all things considered, a high protective tariff would benefit Canada and Canadians at present—that is, if we consider all Canada and all Canadians, as we ought to do. It is for the government to determine to what extent duties should be levied in order that production may be stimulated without adding to the price of goods to the consumer, or destroying export trade because of increased manufacturing costs." (p. 310). But as a matter of fact it *is* maintained, often and loudly, that "a high protective tariff would benefit all Canada and all Canadians." Dr. Laureys should tell us why he disagrees. Of course "it is for the government to determine" fiscal policy; but it is for the authors of books on the foreign trade of Canada to state what they think that policy should be. Dr. Laureys cannot delegate his functions to a committee of council any more than they theirs to him. "We must," he says, "try to sell elsewhere the goods which [the United States] refuses to purchase from us. The policy of treaties inaugurated by Sir Wilfrid Laurier and wisely continued by the King government appears to be the best solution for most of our industrial difficulties."

(p. 311). Why? This is a highly contentious point, but not one syllable of explanation do we get. Currency policy and the foreign exchanges, Imperial preference, and the question of effective retaliation against a higher United States tariff are completely ignored.

Dr. Laureys deserves unstinted praise, however, for his vigorous condemnation of the theory that by applying in Canada Protection on the American scale we should obtain results identical with those in the United States. "To compare Canada and the United States in this way," he says, "is quite inexact. Similar tariff measures in Canada might prove ruinous." (p. 13). The explanation, he tells us, lies in the fact that the United States has a vast free home market twelve times as large as ours. He might have added that the United States has a far greater variety of resources than Canada. These things are true enough, but they are not the whole story. As Dr. Laureys himself points out, disinterested observers "attribute the industrial success of the Americans to purely technical causes . . . such as the excellence of administration in large businesses, and the promotion of employees by merit alone; the small profits per unit, but enormous production increasing the total profit; unlimited production by labourers whose wages are raised as high as possible and proportionately to returns; the utilization of by-products, the organization of scientific research—and so on." (pp. 14-15). Particular instalments of Protection at particular times may have helped American industry in some degree. But since imports, visible and invisible, pay for exports, visible and invisible, any check to the one inevitably checks the other. Protection on the American scale, "Protection carried to the point of insanity," as one writer has called it, has in recent years almost certainly hampered American industry infinitely more than it has helped it. Many Canadians think the tariff the architect of American prosperity. It would be nearer the mark to say that the United States is so colossally rich that it can, without much visible damage, follow policies foolish enough to ruin any other nation on earth. Those who doubt this statement had better ponder the recent history of Australia.

Dr. Laureys also has some wholesome things to say about another popular myth, the balance of trade. "The balance of trade," he declares roundly, "does not indicate the real position of a country. If one wishes to ascertain the actual balance of a nation it is necessary not only to take into consideration the exchanges of goods made, but also to estimate as exactly as possible the less visible elements which modify the trade balance and are not registered in statistics—for example, interest paid to foreign countries . . . or by other countries on loans to them, freights, commissions of bankers and other agents, expenses of tourists, settlers' effects and belongings. These items are often so important as to change completely the comparative position of countries as shown by their trade balances. . . Before the War, France, England, and Germany frequently had unfavourable balances, but were actually the creditors of the rest of the world. In Canada we have a favourable trade balance . . . but in return we transfer annually hundreds of millions of dollars to foreign countries in interest. . . Our large exportation of agricultural products during recent years has been the principal means of balancing our national budget." (pp. 7-8). This might be more clearly put, but it has the root of the matter. A country which is absorbing foreign capital—*i.e.*

producers' goods—tends to have an "unfavourable" balance while the process lasts. In this there is no reason for alarm provided the country can reasonably hope to repay its borrowings. As interest payments and repayments of principal mount up, the "unfavourable" balance tends to disappear and a "favourable" one to take its place. On the other hand, a country which is exporting capital tends to have a "favourable" balance; but as interest payments and repayments mount up the balance tends to become "unfavourable": the country begins to live on the money it has put by for its old age. The whole process is as natural and as inevitable as the alternation of day and night, and there is just as little reason to get excited about it. Or again, a country which lives largely on the proceeds of its tourist trade may have a huge "unfavourable" balance without giving any cause for uneasiness. It is exporting its scenery and amenities, which do not figure in trade returns, to pay for hats and boots and perambulators, which do. Canada's immense tourist trade goes far to "correct" that "lop-sided trade relationship" with the United States which causes so many outbreaks of hysteria among Conservative orators and newspapers.

The balance of trade, in fact, taken by itself and out of its context means just precisely nothing. Dr. Laureys in his first chapter makes that abundantly clear. After this, we feel, "Surely in vain the net is spread in the sight of any bird." But no. On page 20 Dr. Laureys flies gaily in with the assertion that "in the case of Canada we must admit that [the balance of trade] is an index of commercial prosperity." How anyone with even the sketchiest knowledge of Canadian economic history could pen such a statement passes my comprehension. Dr. Laureys must be aware that the years from 1904 to 1914 were for Canada years of unexampled prosperity. Throughout the whole of that period we had not only a surplus of imports over exports, but a fairly large surplus; chiefly, of course, for the simple reason that the inflow of capital was greater than the outflow of capital, interest, and sinking fund payments.

Lack of space forbids any detailed discussion of fiscal policy in this article; but Dr. Laureys has no such excuse. He had a whole book to spread himself in. Nor can he plead that the subject is beneath his notice. Dr. Innis, in his foreword, bemoans the ill effects of Protection. "If," he says, "the production of goods is hampered by the tariff, the government may be expected to make amends by using a larger portion of the revenue acquired from the tariff to develop a market for the goods produced under such discouraging circumstances." (p. xv). In other words: We have built around ourselves a wall which keeps others out and shuts us in. Dr. Laureys assembles materials for a ladder of noble proportions. Why does he never consider the possibility of tearing down the wall?

Someone may say that we have expected too much of this book. The author was addressing himself to Main Street and had to adapt himself to the intelligence and taste of Main Street. Now Main Street, as is well known, has a sovereign contempt for theory. It prefers uncriticized generalizations from its own limited experience. Hence the slimness and timidity of Dr. Laureys' statements of principle. Even so, however, it should have been possible to sugar the pill of theory with a generous coating of information. Canadian economists apparently need to develop a more sensitive professional conscience.

Adult Education

By

Wilfrid Bovey

DURING the past few years we have heard a great deal about Adult Education. So much has been said and written so recently that we often think of this activity as being something quite new, invented, perhaps, by the World Educational Association in England or by the American Association for Adult Education. We think of it, too—naturally enough—as a movement for adults only and as a process similar to that by which schools—most of them at any rate—operate on the minds of the younger generation. There are only three things wrong with these notions. Adult Education is not solely concerned with adults, it is entirely unlike school education and there is nothing new about it.

To take the last point first—Adult Education, in the modern sense of the words, has been going on for several thousand years. One of its first eminent exponents was Socrates, a record of whose adult seminars as preserved by Plato is still one of the greatest of educational documents. "Let a man be of good cheer about his soul," says Socrates, "who has rejected the pleasures and ornaments of the body as alien and hurtful and has sought the joys of knowledge."

Eight years before Socrates was born, on the other side of the world another great philosopher died (478 B.C.) leaving behind him a collection of maxims whose influence we can scarcely measure. One is tempted, though they are not in point, to quote two:

> "Whatsoever things you do not wish that others should do unto you, do not unto them."
>
> "The one word which may guide us in practice throughout the whole of life is charity."

What has Confucius to say about Adult Education?

> "Advance those who excel in anything, and educate the ignorant and the people will exert themselves."

Greece and China are a far cry, but even in Canada we can go back for a hundred years. The Mechanics' Institute of Montreal was founded in 1829 as an adult educational institution; in the middle of the last century McGill professors were delivering addresses in its halls. The Natural History Society with its endowment for the Somerville lectures and the Ladies' Educational Association were only two of many other organizations filling like needs.

So we cannot claim that in forwarding the cause of Adult Education we are doing anything very new or original; we can only say that we are following a great tradition, and regret our incompetence to live up to our exemplars.

What about our next point—still in reverse order—that Adult Education is fundamentally unlike school education and is not education at all, in the usual sense of the word? Let us go back to the Greeks again. "Obviously," remarks Aristotle, "youth are not to be instructed with a view to their amusement, for learning is no pleasure, but is accompanied by pain." Shortly before he has told us that education is the legislator's most important task. An essential feature of "education" was thus that it was compulsory and anyone who doubts that its compulsory nature is likewise the first essential of school education in Canada had better read some of our official reports on the splendid results of the compulsory system. Even in Quebec, where there is no compulsion by law, we have trustees, commissioners and taxes producing the same frame of mind.

Of course, the kind of training which a University, as differing from a school, gives, or ought to give, should depend on the student's own volition. Many reach college automatically because they are clever enough to pass the matriculation examinations, and once they have entered the system they go through to the end of it because there is nothing else to do. Of course, this does not apply to all students and the less it applies at any university the better for the University. We like to believe, and we do believe, that owing to the difficulties of entrance, and to some other causes, there are fewer of these factory-made students at McGill than at some other places in the world.

But Adult Education must always be voluntary, whether it consists in attending a hard-grinding night school, following a correspondence course, attending a lecture in which education is judiciously sugared by entertainment, or listening intelligently to a concert. Those who query the concert may go to Aristotle once again and find that music may be classified as education or amusement or intellectual enjoyment—we have not found much more to say on the subject yet.

Our final point—that "Adult Education" is not limited to the adult—does not need much demonstration. I do not know any more interesting example of "Adult Education" than Mr. Lesslie Thomson inducing a crowd of school children to "sing fare thee well to their pretty young gel for they're away to the Rio Grande". The children's handicraft classes arranged by the Canadian Handicrafts Guild come a close second. Miss Ruth Harvey's adventure in training Guilders from the Stewart to the Saguenay to train their Guides in turn is one of the best efforts of all.

It is much easier to say what Adult Education is not than to say what it is. For this reason I do like to attempt any positive definition. Too many more able folk have tried that and failed. The field is a very wide one. Let me quote two sections from the table of contents of an excellent book by Dr. Joseph K. Hart.

CHAPTER VII.

A CHAPTER FROM AMERICAN HISTORY.

The Great American Tragedy—Conflicting Tendencies and Their Fate—Other Centralizing Outcomes—What has become of our Mind?—How shall we get back our Mind?—What will the School become?—Obstacles to such Achievement.

CHAPTER VIII.

ADVENTURES IN ADULT EDUCATION.

A New Name for an Old Practice—Lyceums, Institutes and their like—The Chatauqua Movement—University Extension—Work for other National Organisations—Libraries, Museums and their Like—Forums—Camps—Summer Assemblies and Summer Schools—Workers Education—The Independent School—More Fundamental Factors in Adult Education—Recent Developments—Some Conclusions.

It is all there, or most of it. I am sorry that we cannot find music—even in the index—and find very little about handicrafts, but that heading for Chapter VII gives us the real incentive—"How shall we get back our Mind?" The answer is that some of us by conscious and individual effort towards mental improvement can go a long way, and that is as near to a general description—I will not call it a definition—of Adult Education as I shall try to come.

What has McGill been doing to fill this need of the community? I hesitate to impose a complete catalogue of our various activities upon the readers of the *McGill News*, and any description must be rather like a catalogue. There is the work carried on at the University by members of the University staff—lectures on University subjects up to University standards—enabling the student who cannot attend at ordinary hours to obtain academic qualification, or in any event to receive the same type of instruction as the regular undergraduate. These courses are supervised by the Extension Committee, and last year nearly one thousand students followed them.

Then there is the highly technical and useful work done by the staff of Macdonald College. Whether they are studying the soils of various sections of the province, or trying to prevent the losses caused on some farm by some obscure disease or parasite, or organising discussion meetings among farmers or conducting winter courses, their activities are of very great value and far too little known.

The Department of Extra-Mural Relations aims primarily at encouraging groups and institutions to organise Adult Education and at co-operating with them in the task. The Department's most ambitious effort has been its share in setting up the Department of Commercial Education of the Montreal Board of Trade. This is in reality a vocational college, providing a series of evening lecture courses which prepare the student for a commercial diploma obtainable after two years' study, or for a certificate of competency in the business of transportation. Special courses given in one or two additional years are provided to cover the further work required as a qualification for membership by the Chartered Institute of Secretaries, the Canadian Society of Cost Accountants, the General Accountants' Association and the Canadian Credit Institute.

The lectures are given by members of the McGill staff, by graduates of McGill and Toronto, and by technical experts. Last year was the first in which the new organisation operated. Two hundred students attended some or all of the one hundred and fifty-one lectures, and it is interesting to

note that where a comparison could be made of examination results we found the standards reached to be surprisingly near those of McGill.

A welcome and interesting development along similar lines appeared when the Bell Telephone Company of Canada established courses for employees in Public Speaking, Business English and French. Other corporations are following suit this year.

Some work has been carried on in co-operation with the Provincial Government. Radio lectures, each lasting about twenty minutes, form part of the programmes of the "Provincial Hour" broadcast twice a week. Three lectures in each fortnight are arranged by the University of Montreal and one is in English arranged by McGill. The balance of each "Provincial Hour" is occupied by a concert and in these concerts the Faculty of Music has taken a large part. The Department of Lands and Forests also co-operated with us in making an aerial film illustrating a winter trip across the little known country between Lake St. John and lakes Chibougamou and Mistassini. This is being used with and without accompanying talks, and a copy is circulated in England by the Educational Films Bureau.

A number of lecture courses of a popular nature were arranged in co-operation with various university departments and organisations outside the University. Series were given at the University by the Departments of Classics, History, Mechanical Engineering and Philosophy. A series was arranged by Dr. Eve for those interested in aviation and another by the Executive of the Graduates' Society for their members. The Department of Physics has offered more than one excellent series and carried its projects to a most successful conclusion.

Outside the University we worked with twenty-three organisations. The most important of these was the Mechanics' Istitute, the committee of which asked us for a number of lectures and provided a full audience for each. But there were many others, and we appreciate the co-operation given us by them all. Our list included the Montreal West Women's Club, the St. Lambert Women's Club, the Mount Royal Women's Club, the Notre Dame de Grace Women's Club, the Verdun Branch of the Canadian Legion, the Westmount High School, the Montreal West High School, the People's Forum, Professional and Business Women's Club, the Montreal Psychology Club, B'nai B'rith, Westmount Thespians, South Shore Teachers' Association, Wesley Church, St. Andrew's Church, First Baptist Church, Christ Church Cathedral, St. Clement's Church, St. Peter's Church, Gordon Church and Grace Church.

Outside Montreal our lecturers visited twenty-three places in Quebec and Ontario. The principal series were those given in the city of Quebec, one under a committee headed by Colonel John H. Price and one under the auspices of the I. O. D. E.

A different system has been established with the help of the University Library. We have set up in the library a large collection of educational lantern slide sets, each set accompanied by a printed lecture. Individual sets or series are despatched to local centres too remote for McGill lecturers to reach. The organising group obtains its own lecturer and makes all necessary local arrangements. The total attendance at lectures of this kind last year was nearly seven thousand.

A new step taken recently was our venture in dramatic production. A play was given in Quebec by the McGill Players' Club and four children's plays in Montreal by the Department of English. All had good audiences, and since Canadians have few opportunities to see "legitimate" productions, we hope to give still more aid to amateur and undergraduate work.

This catalogue is long enough. The reader was promised that it should not be complete, and it is not. Several additions might well be made, but McGill's work in the broad province of Adult Education is only beginning and our greatest achievements are still far behind the needs of Canada. Even if our recital were full and inclusive, it would be apparent that the work accomplished did not begin to measure up to the demand.

And now that I have carried out the editor's instructions to the best of my ability, may I make one comment. The University looks to its graduates for considerable help in this field. The Quebec Branch, one of the latest organised, has at the first possible moment taken active charge of our work in Quebec, and we look forward with a good deal of pleasure to its co-operation. Some other graduates in some other places, Colonel Ralph Stockwell at Cowansville, Mr. Walsh at Strathcona Academy, Canon Fee at the Montreal High School, for example, have also helped us. But we need more support yet in country places as well as in the city. McGill can, and does, provide lectures quite equal to those for which agencies demand high fees—we want our graduates to help in finding audiences.

The radio is bringing music everywhere. This year, for the first time, we are ready to supplement the radio by lectures on musical appreciation. Is it too much to suggest that some of our graduates, who enjoy music and would like to enjoy it more, might organise small gatherings and hear about something else than jazz.

For those who are farther away yet and who are willing and able to devote a little time to the good of the community there are the lantern slide series with accompanying lectures, projectors too, if necessary, and the lecturer can get as much enjoyment out of his work as the audience.

This article is, I am afraid, a little like one of those speeches which get out of hand and refuse to come to an end and keep the perspiring orator on his feet. There is a great deal more that one might say, but probably little needs saying except this—the goal is far distant, but it is very bright.

Education and Canadian Universities

By

The Editor

IN May last there was held at the University of Toronto the Fourteenth National Conference of Canadian Universities. The discussion and papers lasted two full days, plumbed the depths of the present condition of education in Canada and brought to the surface a startling collection of odd facts, old and new. With representatives, at least half of them Presidents and Deans, from French Canada, the Maritimes, Eastern Canada, the Prairies and the Coast, and with no newspaper reporters to beware of, the conversations covered wide ground and were throughout most outspoken and to the point.

It is also an encouraging sign that so many leaders of higher education found time to travel to Toronto and to spend two days talking seriously about colleges as educational institutions. The "executive" touch was refreshingly absent and for once pressing but non-educational irrelevancies like heating plants, library space, rinks and interest charges were kept in their place. Instead the Conference addressed itself to a species of self-examination, a process which some say would have been quite impossible not so long ago. But the right spirit and the right men are now available, and one by one are climbing into the saddle. These signs are beneficent. If the first findings are sobering, well, it is necessary to be sober before anything sane is done.

At times, of course, the give and take of such a discussion induces sparks that should be allowed to die, reveals personal experiences that need not be advertised, and is often necessarily technical; but its general direction and conclusions are easily understood and bear directly on the common educational problem of all of us, and it is of the utmost importance that everyone should know of them. It is painfully familiar to men and women professionally interested in education that all the world considers that they are potentially educationalists and "has a right to his or her opinion" about the matter. It is an indefeasible right. But the men and women who work at education, alone can supply the conviction and assurance given by experience on which general considerations may be based. It is for the layman to concern himself with these considerations and having accepted, or rejected them, as he pleases, to commit himself to the educator as he does under similar circumstances to the "realtor," the banker or the doctor.

At the Conference of Universities, therefore, there was of necessity much technical talk, perhaps even some pedantry at times. But the great mass of ideas were very far from being "academic" in the vulgar sense; they were of immediate moment to the country. They included such subjects as the nature of a liberal education, the humanism of Science, the system of examinations

in our provincial schools, the recruiting of our teaching services, university scholarships, or what might be described as "the neglect of the talented classes," and so on. If these questions do not occupy us as deeply as Waterways or water power, so much the worse for us. But, as the lawyers say, ignorance of the law excuses none.

Strange as it may seem in a gathering of professors, there was a remarkable unanimity about the large questions; where should education aim: where it fails and why; and what remedies have we got?

The first is as easy to see and as hard to reach as the Shining Gate. Education aims to free man from all tyrannies; the tyranny of his body, of his passions; the tyranny of making money; the tyranny of ignorance, narrow-mindedness, provincialism, nationalism, and other isms. A man who has had a liberal education, as Huxley said, "is as completely as a man can be, in harmony with nature." (From the paper by Dr. R. C. Wallace). In modern times man has furnished himself with an immensely greater equipment for achieving this end than ever before, largely through science. No doubt he is abusing science, as he has abused religion and philosophy; it is the business of education to stop the abuse without abandoning science.

Where education failed was almost equally clear. Our school and college courses and manner of teaching are losing, in fact have lost, touch with the life of the modern child and young person. The breath of science does not enter our otherwise efficiently ventilated class-rooms; such excitement as our fathers felt over politics or religion, and they seem to have been more excitable then we, is lost in the daily decanting of general history; subjects seem to have no life in them, in short, not to be compared with the travelogues of the "silver screen."

Education is failing too because, like modern war, it is being mechanized. Teachers punch clocks, professors fill out forms; curricula remain fixed for a generation at a time. The administrative machinery of the central organization extends its meccano arm and attaches each day a new clamp on the freedom of the lecturer or the teacher. The "system," that blessed word, sucks the blood of individual initiative into its capacious maw, and gives nothing in return.

Lastly, education fails to attract good teachers. In the university a social standing and perhaps a greater degree of freedom plus a liberal infusion from outside the country, keep up the standards. But in the schools, the first rate and the second rate are yielding to the third and fourth; the woman is replacing the man. The result of this is an increasing population of untrained teachers. For while, of course, the substitution of women for men does not mean a decline in teaching quality, it does mean less training, for the average service of women teachers is very much less than that of men. And, to quote Dr. Wallace again, "Education is one and undivided. The whole profession is lowered if the elementary schools are lowered."

The reasons for this deterioration are to be found partly in those who actually conduct the work of education, partly in those who direct it. But because the directors tend more and more to treat the matter from a non-educational point of view, the professional teachers become more and more

powerless to improve matters. Thus politics in some places, bureaucracy in others, the service of commerce and industry in a third, these become the motives operating on education. The province, for example, may begin by taking a paternal hand in the erection and financing of a provincial university. It follows by interfering with appointments, for reasons of prejudice, making appointments for political reasons. Or the man of commerce becomes a university benefactor. He accepts a position on the governing board; and sooner or later may begin to exercise an influence on the university that is definitely dangerous to its work. For that work is to free men's minds; and an influence used in a special interest, however worthy in itself, does not free the mind.

These alien forces, therefore, threaten the free development of university education. And if the development is to go on, the wielders of those forces must see this. But, as was recognized, the university cannot divest itself of all responsibility. For instance, the paralysis, the *rigor mortis*, that afflicts the examination system in many places, by which questions and the marking of them are reduced to a mechanical checking of results, this can be remedied by university examinations that set a different and better kind of question. In the same way the gulf that divides the schoolmaster and the university professor can be bridged. As it is, both work diligently at their task, what time they malign each other for neglect. "Many keen teachers are quite cut off from intellectual life" by this separation between two branches of the same service.

In a way more difficult to lay the finger on, the university is losing hold on itself, as it were, by allowing aims and purposes that are not its own to take charge of its main business. The matter will be clearer if we think of the men who make a university, the professors and the senior authorities, and not of the abstract institution. In this way we see that the men and women whose work it is to teach students and to preserve a haven in the community where they can give full rein to their minds and imaginations for four years, are bound to be affected by the ordinary world about them. They should be, to some degree. But that world in Canada is predominantly given over to creating and spending wealth. And the danger as seen by those who know and respect it most, is that the university will forsake *its* predominant interest for that of the "man in the street." Not that the ideal of the university should be to destroy our interest in developing the material wealth of Canada—that would be a noble mixture of pedantry and hypocrisy—but the university should develop another kind of wealth as well, the immaterial wealth. To this everything else should be subordinate.

A striking example of this betrayal, often quite unconscious, of the primary character of a university, is the installation of Commerce Courses in the Arts Faculty of the University under the guise of a liberal education. There was considerable debate over Prof. Underhill's paper on Commerce Courses in the Arts faculty; and probably less agreement about the place of that Course. But he drew attention to a disastrous tendency. Where there is a Commerce Course in Arts, the students with most ambition, energy, and strength of character are flocking into it. (This is to be expected in any community in which commerce is the chief concern.) Because it is in the Arts

faculty, it is naturally believed that Commerce has the same educational values as Arts. But from the nature of the Commerce this is clearly not true. The Commerce student is taught, as far as the University can do it, to manage a business. It is a practical course, a technical course, it describes the way things are done and teaches you how to do them.

But this is not the purpose of an Arts or liberal education. The Arts course aims to rouse the "speculative instinct, the imaginative curiosity, the urge to philosophical reflection which have produced the finest fruits of European civilization." And it is false to represent the Commerce course as doing this because it happens to be in the Arts faculty. It is fair neither to the commerce student nor to the arts student.

There may be a need for a Commerce course. But it is a technical training and not a liberalizing process, except in an incidental way. The university, therefore, may be guilty of confusing two very different things, with unpleasant results for Canadian education.

It was also recognized in the Conference that outside the peculiar realm of education there are many obstacles to the work of the university and the school. The enormous increase of pleasures and distractions, the rising cost of living, these inevitably cut into the life of the school child and the student, and cause the more reflective side of one's mind to be neglected. And then for the schools and colleges there is still the as yet unsolved problem of "educating" thousands where formerly there were hundreds. It grows bigger every day and has completely floored inoffensive government departments which cannot be expected perhaps to know what to do about it.

In conclusion, the general impression of the Conference was first that education in all its branches was a continuous and unseverable process: that owing to new conditions and to greater numbers, but also to apathy and wrongheadedness which can be altered, the process was breaking down. Over attention to administration and not enough to the work of teaching is extinguishing the life of the system. Thirdly, that amongst other things there is a tendency to neglect the true ideal of a university for other and sometimes lower ideals. Fourth, that the salvation of education, which everyone agrees is vital to our national health, should be in the hands of our educators and not with the politician, the churchman, the rich man or some other outside agency.

There was, of course, no majority and minority summary of the Conference and this is only a single impression. The official report contains the papers and the discussion, and the visible work of the Conference ends there. No doubt everyone carried away some fresh confidence through knowing that others were behind him. But even in the printed report there are traces of hopelessness that should not be ignored by those who really run our universities and educational systems. When every excuse is made, a hundred details of those systems, right across Canada, are definitely bad. Are they going to be changed? Are the old people and the old ideas going to give place to new people and new ideas, or are they, like a crew of poetic but futile Casiabancas going to stay on deck while it burns beneath them?

This is the question on which the Conference ended. The situation is bad: it can be bettered: is it going to be done?

MONTREAL, SEPTEMBER, 1930

When educational discussion does not produce contempt or fury, it often creates instead a cynical and callous attitude towards those who persist in mouthing their fruitless self-satisfactions at the present condition of affairs. The subject seldom stirs real enthusiasm. There was enthusiasm at the Conference; but there was also noticeable the feeling that, in spite of the patent defects of our education, the public voices will continue to say all is well; foreigners will still pay us empty compliments, and our rulers and those set in authority over us will still continue in their masterly inactivity. The urgent question is: Which will be justified, the enthusiasm or the pessimism?

A Note on Proportional Representation

THE new dust raised by the election result has perhaps buried the dust put up in recent Liberal days. But considerable discussion was provoked by Mr. Mackenzie King's announced intention of bringing in a proportional representation bill in those days, and it may be that the subject will be raised again. Whether anything will come of it in our time is another matter. Our present electoral system is admittedly unsatisfactory, but we are a conservative people, and "P. R." has for most of us all the terrors of the unknown. Until it emerges from that condition rational consideration of the idea is not very easy. It may not be amiss therefore to review briefly just what proportional representation means.

(1) The single-member constituency disappears. The island of Montreal, for example, instead of being divided into thirteen ridings returning one member each, would vote as one constituency returning thirteen members.

(2) Each elector has one vote only. He marks his ballot for as many candidates as there are seats to be filled, putting opposite the names of the candidates the figures 1, 2, 3, and so on, in the order of his preference.

(3) To be elected, a candidate must receive the "quota" of votes. If there are two seats to be filled the quota will be one vote more than one-third of the total number of electors, since not more than two candidates could receive this number of votes. If there are three seats, the quota is one more than one-quarter of the poll; and so on. Put in general terms: if there are n seats and t voters, the quota is $\frac{t}{n+1} + 1$.

(4) Any candidate who receives the quota or more than the quota of first preferences is at once declared elected.

(5) If a candidate has more than the quota of first preferences, all his ballots are recounted, and a proportionate number of the next available preferences of his supporters is transferred to other candidates. For instance, if the quota is 35,000, and candidate A receives 60,000 first preferences—a surplus of 25,000—all his 60,000 ballots will be recounted and sorted out according to the next available preferences indicated ("next available" rather than "second" preferences, because the second preferences may have been given to a candidate who already has a surplus of first preferences.) If 40,000 of these ballots give their next available preference to candidate B, then the returning officer transfers to B $\frac{40,000}{60,000}$ of 25,000 votes.

(6) If a candidate gets a surplus as a result of transfers, a proportionate number of the next available preferences marked on the transferred ballots will be again transferred to the other candidates indicated.

(7) If the surpluses are exhausted before all the seats are filled, then all the ballots of the candidate at the foot of the poll are transferred to the next available preferences of his supporters; and so on up the list of candidates till all the seats are filled.

It is worth noting that, complicated as the process may seem, the voter's share in it is simplicity itself. The returning officer's part is not quite so easy, but it is not very difficult. Whatever the merits or demerits of "P. R.," it ought not to be ruled out as beyond the political capacity of the Canadian people.

E. A. F.

BOOKS

*A New Collection of Canadiana**

THIS Catalogue is dated May 31st, and it represents, as a note tells us, the results of "twelve months' search" in various countries for pictures and maps illustrative of Canada past and present. It is a striking example of what money and enthusiasm can do, for it lists just upon 1,600 items and includes, as far as we can see, practically all the best known sets of Canadian North American collections. It will be useful to the historian as well as the casual visitor to the Manoir Richelieu, but, if we may begin with criticism, something should be done in subsequent issues to bring some order out of the chaos that prevails in these pages. There is no principle of arrangement evident anywhere, so that the only impression left by a general glance through is that of mass or multiplicity. There is no doubt left in one's mind that if the Manoir has not got the "largest collection of this kind in the world," it seems to have; and this in a world where superlatives count for something is really all that matters.

When we come to go through the collection itself, we find the same smothering confusion. Fine old mezzotints hang cheek by jow with very ordinary book or magazine illustrations: 1837 scenes distract one from river scenes forty or fifty years earlier and so on.

No doubt in time the same care and zeal that has brought the collection into being will be applied to its arrangement on the walls and in the catalogue and perhaps we might hope that to zeal will be added the more severe virtue of discrimination, for some of the pictures at least are out of their proper setting and could easily be buried in an appendix on an east wing somewhere.

In the meanwhile the catalogue is an interesting record of what our ancestors did when they could not kodak as they travelled. Such groups as Smyth's "Six Elegant Views of the Most Remarkable Places in the River and Gulph of St. Lawrence" Murray's Montreal Set; Sproule's Lithographs of Montreal in 1830, republished by Bourne; Short's Quebec set, "taken on the spot by Richard Short, Purser of His Majesty's ship the Prince of Orange" about 1761, and many others, take us back over the century and more very vividly, all the more so because here the pictures are in groups and produce a cumulative effect.

Collectors of Bartlett prints too will be interested to compare their treasures with the one hundred and eighteen listed here. While ornithologists can spend hours going over the collection of Audubon prints enumerated here; and a third group study might be made too of the Wolfe pictures in this collection. Dr. Clarence Webster's book on the portraits of Wolfe would make a useful supplement to their survey.

The abundance is so great that detailed reference is impossible. At present it is clear that the catalogue is designed, naturally, for the casual hotel

*Catalogue of The Manoir Richelieu Collection of Canadiana, Compiled by P. F. Godenrath: Canada Steamship Lines: 1930.

visitor on a rainy day, who feels piously inclined to learn something without too much effort. He would not be offended by Sir Jeffery Amherst's being described as a "Field Marshall," or by reading about the siege of "Louisberg." When it is put into some sort of permanent and logical order and when the collection is arranged to correspond, both will be of real value and interest to the consistent student of the Canadian past, for the hotel authorities give every assistance to anyone who wishes to examine them seriously, and such examination is well worth while.

In the meantime it is some satisfaction to see in this catalogue assurance that some stop is being put to the outflow of Canadiana from this country. Many Canadians are doing their part in this respect, but privately, and only their friends see their collections. But even if the entrance fee, as it were, to the Manoir Richelieu is considerable, its collection of maps and pictures is open to everyone who cares to go and see it and however rich one's knowledge of the history of Canada may be this extensive monumental illustration of it will be sure to make it richer and more memorable.

* * *

The Survival of the Classics

Scene at the foot of the inscription on the Molson's Hall wing of the Arts Building, McGill, summer 1930. Two interested, but puzzled visitors from the United States read the legend:

AD
MUNIFICENTIAM . INSIGNEM
GULIELMI . MOLSON
COMMEMORANDAM
HOC . MARMOR
UNIVERSITAS . GRATA . POSUIT
A.D. MDCCCLXI

Even the name of the founder seems to be too deeply disguised . . . but a ray of light comes up from the subconscious—the last flicker perhaps of compulsory school or college Latin.

"Well, I know 'posuit' is a verb, anyway," said one, and they turned away content.



Montreal, September, 1930

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The McGill News Supplement
1929-30

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This Land

We have a land that is young,
We have strength in our limbs;
But who will make us a song
Of our first dreams?

Poor seed we have sown
On this day and that;
Fierce hates have been born;
Scars of old wounds still smart.

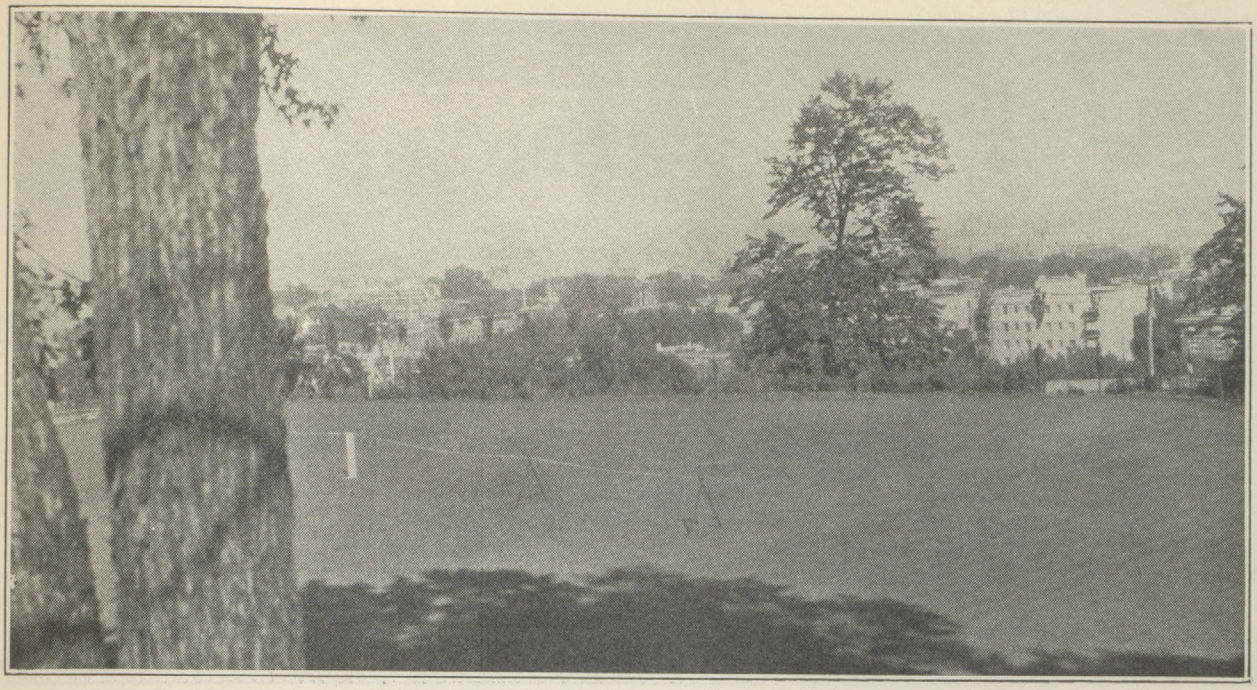
But we are young: in our veins
Is a fire the north sun works,
And our myths are found fresh in the tales
Told by our streams and rocks.

So we do a great wrong
To boast of our crops and trade,
Of ships on far seas,
Of gold coin stored.

This is talk for the old,
For men with scorn on their brows.
It is a dull theme
When the warm blood flows.

Will there come forth no man
To stop these words in the mouth?
Shall this dark dust fall
Thick on the eyes of youth?

We shall have no soft lines
On the face, when old age comes,
If we make not a song
Of our first dreams.



THE NEW PLAYING FIELD

This photograph gives an impression of the new field's situation in Macdonald Park above the Percival Molson Memorial Stadium. On a clear day, the view includes the city, the new Montreal Harbour Bridge, and the Monteregian Hills beyond.

McGill's New Playing Field

By D. STUART FORBES

OUTDOOR fall athletic activity has been increasing steadily at McGill and we now have three intercollegiate and nine interfaculty Rugby teams. In addition, there are two interfaculty and one intercollegiate Soccer teams, and one intercollegiate English Rugby team.

To provide for practice and match periods, with only the Stadium and the two lower campuses at our disposal, was extremely unsatisfactory, as weather would often upset the time-tables, causing delay and confusion.

A large amount of loose earth became available recently when power and telephone lines on various Montreal streets were placed underground. Advantage was taken of this, and a full-sized football practice field was constructed immediately north of the Percival Molson Memorial Stadium. The field is over two hundred feet wide and nearly five hundred feet long, and the fill grades from nothing to a maximum of about forty feet. This was levelled, covered with a four-inch dressing of sifted loam, and sowed with a mixture of grass seed suitable for the existing conditions. A dressing of fertilizer was added, eight long-range sprinklers were installed, and the grass was cut periodically. In order that the grass might be kept in first-class condition, a large compost heap has been made due west of the field. As the cost of fencing was prohibitive, it was decided to plant a row of poplars close together along three sides of the field and to have these trimmed until they formed a suitable hedge. It is proposed to use this field for Soccer and English Rugby, to use the Stadium for Canadian Rugby, and to reserve the two lower campuses for the promotion of interfaculty games. Dressing accommodation has been provided for the new field in the old stone residence of the Law family, which has been unused for fifteen years, ever since the grounds were bought for McGill by Sir William Macdonald.

McGill has a large property in an ideal location in the Macdonald Park, and it seems desirable that it should be graded and divided into athletic fields and courts as soon as possible, so that students will be able to take advantage of the benefits it would provide. The desirability of having playing fields in close proximity to dormitories should be given consideration when plans for the future development of the University are being decided upon.

It has been suggested that the new ground be called "The Sir Arthur Currie Field" in honour of our Principal. Credit is also due to Mr. Tom Graydon, known to you all, and to P. W. MacFarlane, the new Superintendent Engineer at the University, for the completion of this work. The seed for the grass was recommended and supplied by Wm. Ewing and Company, Limited.



THE NEW PLAYING FIELD

This view shows the southeast corner of the new field. As described in the text of Major Forbes's article, a fill forty feet deep in places was required to bring the level playing surface into existence.

The top dressing and sowing was carried out by the White Landscape Company, and blasting was done by Anglin-Norcross, Limited.

In addition to work on the new field, noteworthy improvements have been made at the Percival Molson Stadium. A new press stand has been erected on top of the boxes, which has made it possible to increase the number of box seats. The whole field has been seeded, watered, and cut throughout the summer, and it is now in condition to stand heavy use without deteriorating into a mud field as the season progresses. The lighting equipment for night practice has been increased by over one hundred thousand candle power of new type lights and reflectors. Painting and modern wire fencing have also improved the appearance and general usefulness of the Stadium. For the coming season, the schedule of Senior Intercollegiate Rugby games will be as follows:

September	27th—Westward	at	McGill (Exhibition)
October	4th—R.M.C.	at	McGill "
October	11th—McGill	at	Toronto
	Queen's	at	Western
October	18th—Queen's	at	McGill
	Western	at	Toronto
October	25th—McGill	at	Western
	Toronto	at	Queen's
November	1st—Toronto	at	McGill
	Western	at	Queen's
November	8th—Western	at	McGill
	Queen's	at	Toronto
November	15th—McGill	at	Queen's
	Toronto	at	Western

Notes

For the first time in some years, the annual meeting of the British Medical Association was held on Canadian soil in August. Many McGill graduates attended the convention, which, under the presidency of Dr. W. Harvey Smith, Med. '92, took place in Winnipeg. Dr. Harvey Smith was later elected President of the Canadian Medical Association for the coming year.

Dean Percy E. Corbett, of the Faculty of Law, was among those who addressed the Institute of Politics at Williamstown, Mass., in August. Dean Corbett vigorously defended Canada's claim to all land and islands lying between the Canadian mainland and the North Pole, as set forth in a declaration some time ago by the Dominion's Minister of the Interior. Questioned as to the validity of such a declaration, Dean Corbett replied that it has "No more validity than the Monroe Doctrine," as set forth in the declaration of President Monroe. He admitted that the Canadian Minister's declaration had never been formally conveyed to the powers of the world, but he maintained that the policy definitely represented the point of view of the Canadian people and the considered attitude of the Dominion Government.

Distinguished British visitors to the University in August included Lord Beauchamp, leader of the Liberal Party in the House of Lords and Chancellor of London University, and Lord Dawson of Penn, Physician in Ordinary to His Majesty the King. Lord Beauchamp was deeply interested in the beauty and facilities of Moyse Hall, and Lord Dawson of Penn, an old and true friend of McGill, expressed the opinion that the McGill and Toronto medical schools held a proud place among the finest in the Empire. Lord Dawson's statement to the press that "His Majesty has made a complete recovery and is now in excellent health" is one which, after the anxiety of last year, all loyal citizens of the Empire must warmly welcome.

(*Continued on page 37*)

What *Does* The Graduates' Society Do?

ACTIVITIES DURING LAST COLLEGE YEAR

(from September '29 to June '30)

McGILL NEWS, the quarterly magazine published by the Graduates' Society. Circulation 4,500. During the year much study given to editorial policy, and improvements in the appearance and contents. Advertising sales increased.

GRADUATES' ENDOWMENT FUND. Through the generosity of our graduates, we have collected during the past year $8,348.34 from 618 subscribers.

McGILL GRADUATES' LECTURESHIPS. The income from the Graduates' Endowment Fund has enabled a start to be made on this means of enriching the cultural development of the University.

GRADUATES' EMPLOYMENT BUREAU. A number of graduates have been assisted, while many enquiries from employers have been handled. More financial support is required for this work.

FOOTBALL PROGRAMMES. Were published entirely by the Society, as a means of bringing this activity under the control and management of the University.

RECORDS OF GRADUATES. New files and records were installed for 10,000 names.

ALUMNÆ SOCIETY DIRECTORY. Publication of new directory paid for by the Society.

BRANCH SOCIETIES. Arrangements were made for the Chancellor, E. W. Beatty, Esq., and Dr. C. F. Martin, Dean of Medicine, to meet the McGill Graduates at Victoria, Vancouver, Edmonton and Winnipeg; and for the Principal, Sir Arthur Currie, to meet and address the McGill Graduates of the Montreal and the Quebec branches. Interchange of records and general correspondence was maintained with branches in Halifax, Quebec, Ottawa, Toronto, Winnipeg, Edmonton, Vancouver, Victoria, New York, Detroit and Chicago.

MOYSE HALL ENTERTAINMENTS. All Montreal graduates were circularized to bring their attention to these activities of the Department of Extra-Mural Relations.

FREE SUNDAY AFTERNOON LECTURES. A series of six lectures was arranged for all McGill Graduates and their friends. These were well attended.

GRADUATES' EVENING ENTERTAINMENT. Montreal men graduates were given a very successful smoker, at which Sir Arthur Currie made an eloquent address.

GRADUATES' THEATRE NIGHT, at the "Red & White Revue." The entire house was taken by the Graduates for the first night of the performance.

McGILL DEBATING UNION SOCIETY was assisted in holding their 50th anniversary celebrations, which were presided over by the Visitor, His Excellency Viscount Willingdon.

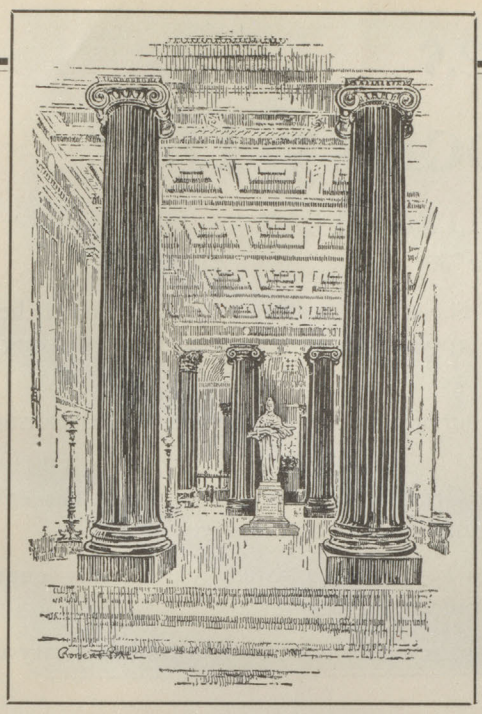
CONVOCATION. Arrangements were made for Graduates to attend Convocation, and the two hundred seats allotted to the Graduates' Society were quickly distributed.

EVERY ALUMNUS SHOULD SUPPORT THE GRADUATES' SOCIETY

Annual Dues $3.00 ***Life Membership $50.00***

These Dues include with your membership, a subscription to "The McGill News", a quarterly magazine which is the only publication which keeps you in touch with the University.

Members, and All Other Graduates and Past Students please send in your Dues for 1930-31 *Now*.



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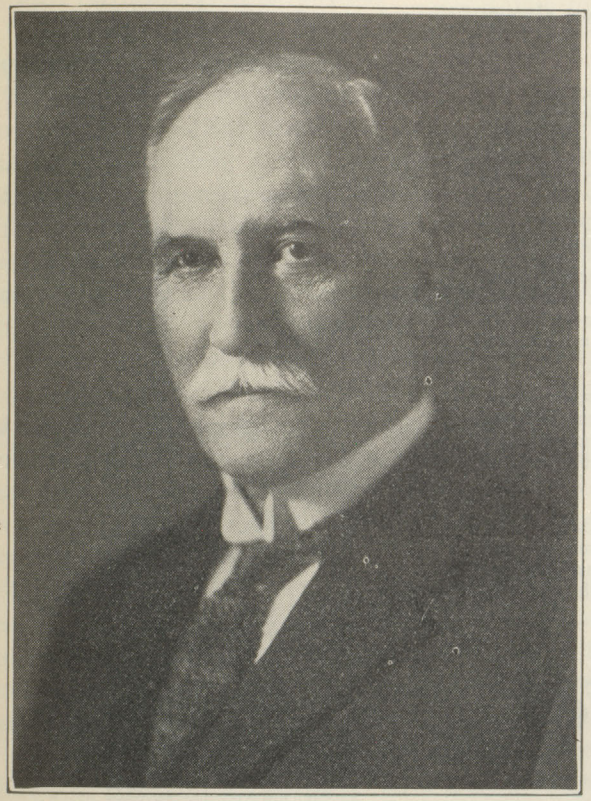
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Personals

The *News* welcomes from graduates personal items for inclusion in these columns. Press clippings, or notices, should be sent to H. R. Morgan, Esq., c/o Recorder Printing Co., Brockville, Ontario, or to the Executive Secretary, Graduates' Society, McGill University, Montreal.



DR. J. A. NICHOLSON

Whose resignation as University Registrar, after 28 years and four months of service, was regretfully accepted by the Governors some weeks ago.

Dr. Frank G. Pedley, Arts '13, Med. '16, Assistant Professor of Industrial Hygiene at McGill and Director of the Industrial Clinic of the Montreal General Hospital, has been appointed Director of Financial Federation and the Montreal Council of Social Agencies, to take effect in November.

Ralph C. Silver, B.Sc. '27, M.Sc. '29, is now a Relay Engineer with the Gatineau Power Co., Ottawa.

Maynard J. Spratt, Sci. '22, is now acting as Chief Engineer of the Saskatchewan Wheat Pool, with headquarters in the Wheat Pool Building, Regina, Sask.

Dr. Ian MacKenzie, Med. '27, has opened an office for the practice of surgery in the Medical Arts Building, Tulsa, Oklahoma, U.S.A.

The Royal Securities Corporation announced in June the appointment to its office in Victoria, B.C., of C. K. Morison, Arts '13, who was formerly on the staff of the Royal Financial Corporation.

G. Herbert Cole, Sci. '04, is now Student Advisor at the University of Redlands, California. During the war his activities included Y.M.C.A. work among the 140,000 Chinese labourers employed in France. In a recent letter, Mr. Cole says that the University of Redlands is conscious of a debt to McGill for the services rendered in its early days by the late George Robertson, Arts '81, who, as Professor of Biology and Geology, contributed much in culture and in character building to the university and the men who attended it.

W. G. Smart, Sci. '92, president of the Erie Steel Barrel Company, of Erie, Pennsylvania, has recovered satisfactorily from serious injuries received in a motor accident near Silver Creek, N.Y., on March 8th last. Mr. Smart, whose skull was fractured, suffered other injuries, and Mrs. Smart suffered dislocation of one of the vertebræ of the spine. After convalescence in the South, they have returned to Hamilton, Ontario, in much improved health.

Dr. Thomas A. Baird, Med. '85, of Bay City, Michigan, father of Dr. Fred. S. Baird, Med. '13, was the guest of honour of the Bay County Medical Society on June 9th, at a banquet tendered to celebrate his 44th year in active practice. Dr. F. McD. Harkin, Med. '85, of Marquette, Michigan, and Dr. Duncan A. Cameron, Med. '84, of Alpena, Michigan, were present, Dr. Harkin being the principal speaker.

After spending the past year as a Demonstrator in the Physics Department at McGill, W. H. Moore, Sci. '27, has now joined the Engineering Department of the Canadian Marconi Company, Ltd., Montreal.

J. M. C. Duckworth, B.A. '27, M.A. '28, has assumed duties as Executive Secretary of the Y.M.C.A., Notre Dame de Grâce, Montreal. Mrs. Duckworth (Muriel Helena Ball, Arts '29) will be Women's Secretary of the S.C.A. at McGill this autumn.

Dr. L. Duncan Croll, Med. '27, is carrying out post-graduate work abroad.

Dr. C. H. Fox, Med. '95, is now practising as a consultant in diseases of the eyes, ears, nose, and throat in Kearney, Nebraska.

Dr. Arnold Branch, Med. '20, has been granted leave by the Harvard Medical School to occupy the Gwyneath Pretty Studentship for Research at Cambridge University.

Dr. Stanley Findlay, Med. '25, is an anæsthetist in the Bellevue Hospital, New York City. He intends eventually to practise Medicine in Vancouver, B.C.

Dr. Peter D. Ward, Med. '24, assistant superintendent of the Billings Memorial Hospital, Chicago, has succeeded Dr. Donald C. Smelzer, Med. '18, as superintendent of the Charles T. Miller Hospital, St. Paul, Minn. Dr. Smelzer resigned to become medical director of the Graduate Hospital of the University of Pennsylvania, Philadelphia.

Colonel Robert Innes, Agr. '11, Deputy Minister of Agriculture of Nova Scotia, attended the fourth World's Poultry Congress in London, arranging the exhibit of the Maritime Provinces at that gathering.

Dr. Jeannette C. Sammett, Med. '29, has left for the University Hospital at Ann Arbor, Mich., to become assistant-resident in the Department of Pædiatrics. Dr. Sammett spent the past year as interne in Medicine in the Royal Victoria Hospital, Montreal.

(Continued on page 36)

LIBERATION

ONE does not have to go back many years to reach the time when most of the water used in the house had to be carried from the spring or well, not always situated close to the house.

Even the introduction of the hand pump, which brought water to the kitchen, did not dispense with the backbreaking work of pumping and lifting heavy pails.

Woman's work on the farm, and indeed in the city, involved an enormous expenditure of strength and vitality. Among other tasks she was dependent on her own hands to do the family washing, a good deal of the milking, the filling and cleaning of lamps, ironing, taking care of the poultry (which meant also the poultry house), to say nothing of innumerable minor tasks, and at the same time had to rear, feed, clothe and otherwise provide for her children.

Today she is liberated from much of the drudgery of household tasks. The washing, ironing, lighting, cooking; and on the farm, milking, poultry work, dairy work, and the pumping of water, can now be done by electricity.

The electrical servant also relieves the man of the household from many tasks which he used to take as a matter of course.

The Northern Electric Company is pleased that in the manufacture of wires and cables, and in the distribution of many electrical household appliances, it has been able to assist in the liberation of woman from some of her work, that so frequently overtaxed her strength and endurance.

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260T

Miss Hurlbatt's Degree

The conferring of an honorary degree upon Miss Hurlbatt at the last McGill Convocation was a source of gratification to the many students who have passed through the Royal Victoria College during her years of office. In acknowledging the honour conferred upon her, Miss Hurlbatt spoke as follows:

"Mr. Vice-Chancellor, Members of Convocation, Members of the Graduating Class,

"I have lately returned from a lovely island, where a charming feature of the native architecture is what is called the 'Welcoming Arms', the spreading stairway leading to the hospitable door. To return is to be grateful for this warm welcome and this open door at McGill. Every graduate knows that once that door is open (in spite of valedictories), there can be no more going out. McGill has our allegiance to the end.

"Those who receive the honours last on today's programme must feel deeply grateful to the University, and especially grateful for the generous sympathy of the youngest graduates upon whom the good wishes of this great gathering are concentrated—they have won their reward by hard work and the ordeal of recent weeks—penalties we have been spared.

"Great as is the pleasure of being admitted to this Good Companionship of men and women, it is a greater honour that it falls on me as representing one of the most generous and useful benefactions ever made to McGill—the Royal Victoria College.

"I am not one of the early pioneers of Women's Education, though old enough to have known some of them, and to have done something near to pioneering during fifteen years in Wales and London, before coming to Canada. It was a privilege to come here in time to know some of the pioneers of Canada's present power and pride of citizenship—and to have been brought here by one of them.

"There must be far greater wealth in Canada today—many more millionaires, even in Montreal alone. But Lord Strathcona's Foundation remains unique—a witness to his insight, to his foresight, his understanding of the scholar's needs, his understanding of the welfare of the University and its sore need of endowments.

"It has stood for over thirty years, by their own testimony, a blessing to countless women, who, in their turn, are giving back to their country the fruit of its seed-time; and one form of the harvest is in the daughters entering the College in their mothers' footsteps, even already graduating today, and for many years past.

"Perhaps there may be among us today, if not a millionaire, then a poor student, man or woman, treading the old honourable road of hardship and endurance, who, in the fullness of time, like the pioneer founders of old, may make the gesture of the debtor, pouring out a tribute to the University, succouring it in its need.

"Those of my generation can say: 'With a great price have we bought this freedom.' The graduates of today can say: 'But I was born free.' If that freedom is the freedom of the spirit and the liberation of our powers, then each of us must pass it on untarnished and enlarged to those who follow us.

"Thank you, Mrs. Vaughan, for your very kind words of introduction, and you, Mr. Vice-Chancellor, for your kind welcome."

* * *

The University Library 1920-1930

(*Continued from page 11*)

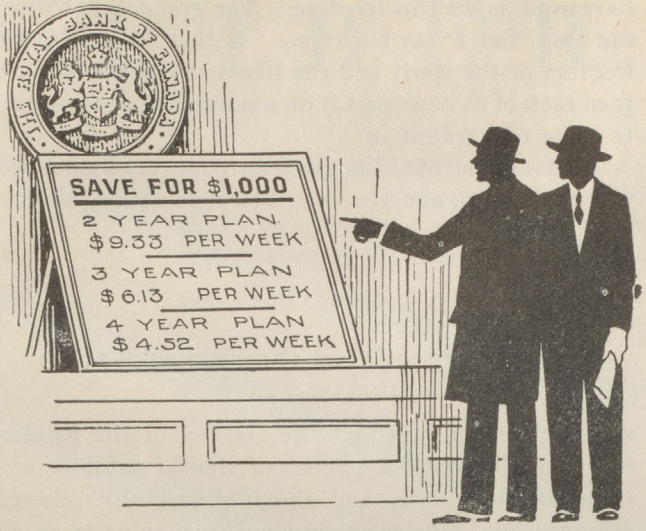
and the arts of writing. The Gallery of the Reading Room is arranged for a series of shorter exhibits, also open to the public, and showing carefully selected, arranged, and labeled material of such subjects as, for example, European travel, the Shakespeare and Parkman centenaries, oriental manuscripts, costume, binding, etc.

A vacant arch opposite the main entrance has been filled with an exhibit case, changed weekly and suitable for the display of recent accessions, special material, and books and pictures of timely interest.

Among the Library possessions, not readily available for display but constituting nevertheless some of its valuable treasures, are the Canadian historical and literary manuscripts and the Blacker collection of zoological correspondence.

What of the future? The growth of the Library is bound up with that of the University as a whole. No great university can thrive without a great library. The collecting of books, however, is not an end in itself, nor the aim of a university, rather the *knowledge* of how to use books and the *habit* of using them effectively are two fundamental aims of higher education. No technical training can be acquired, and no professional skill can be developed without books as a foundation and background, or as instruments.

To curtail the Library, in space, staff, equipment, or books, is to limit the true activity of the University as a whole, for the Library is not a department, but a service, as truly and essentially as are light, heat, and power. The University is the leader, pioneer, and foreseer of things to come in the intellectual life of the community. As such it transfers into the life of the city and the countryside the intellectual light, the emotional glow, and the effective productive power that lie latent in books, until students are wisely taught to transform this energy into their daily life among men. From this point of view, the University Library becomes one of the great instruments of public service—great in possibilities and, when properly administered and wisely used, great in achievement.



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Deaths

ABBOTT-SMITH, Dr. George W. (Med. '24), on May 26th, 1930, in Westmount, P.Q.

BRYAN, The Reverend Andrew Crawford (Arts '88), in July, 1930, in Calgary, Alberta.

BURKE, Kenneth Macnider (Agr. '23), on June 26th, 1930, at Metis Beach, P.Q.

CRAWFORD, Dr. John Wesley (Med. '11), on June 28th, 1930, in New York City.

CREIGHTON, James George A., C.M.G., K.C. (Law '80), on June 27th, 1930, in Ottawa, Ontario.

FARLEY, Dr. John Jay (Med. '73), in July, 1930, in Belleville,, Ontario.

GUSTIN, Dr. Smith E. (Med. '85), on June 1st, 1930, in Bay City, Michigan.

HALPERIN, Dr. Sidney J. (Med. '25), on June 25th, 1930, in New York City.

HART, Gordon David (Com. '24), on June 24th, 1930, in Montreal, P.Q.

HARVEY, Alfred Eugene, K.C. (Law '90), on August 4th, 1930, at Old Orchard, Maine.

LECKER, Calla (past student), wife of Dr. Harry Dover (Med. '14), on July 12th, 1930, in Ottawa, Ontario.

McCARTHY, James M. (Sci. '87), on May 22nd, 1930, in Quebec, P.Q.

NUTTING, Charles A., K.C. (Law '72), in May, 1930, at Waterloo, P.Q.

ROBERTSON, Charles W. (Com. '24), on July 18th, 1930, in Montreal, P.Q.

In the period since the June issue of the *News* was forwarded to the printers, the Graduates' Society has received notice of the deaths of a number of well known and distinguished alumni.

From the United States word was received that Dr. S. E. Gustin had died in Bay City, Michigan, where he had practised for more than forty years, after graduating with high honours at McGill in 1885; that Dr. S. J. Halperin, who graduated only five years ago, had died in New York City, at the Bellevue Hospital, where for some years he had served on the resident staff; and that Dr. J. W. Crawford, practising specialist in diseases of the ears, nose, and throat, had died, also in New York, on June 28th. In addition to these deaths, which occurred in the United States, the Faculty of Medicine suffered through the death of Dr. J. J. Farley, a graduate in 1873, who, after long service in his profession, died in Belleville, Ontario, in July; and through that of Dr. George W. Abbott-Smith, who died at his home in Westmount, P.Q., on May 26th. The Faculty of Arts also suffered, through the death of the Reverend Andrew Crawford Bryan, which took place in July in Calgary, Alberta.

The Faculty of Law grieves for a number of men whose work in the past years has reflected high credit on the University. In May, Charles A. Nutting, K.C., a graduate in 1872, died in Waterloo, P.Q., and in June, J. G. A. Creighton, C.M.G., K.C., Law Clerk and Master-in-Chancery and Parliamentary Counsel of the Senate, dropped dead from heart failure in the Rideau Club, Ottawa. Equally sudden was the death of A. E. Harvey, K.C., Recorder of the City of St. Lambert, P.Q., and practising lawyer of Montreal, who died from cerebral hæmorrhage while on a summer holiday at the Atlantic House, Old Orchard Beach, Maine. Mrs. Dover (Calla Lecker), who died in Ottawa on July 12th, was a former student in Law.

Members of the Science Class of 1887 and many others will regret to hear of the death of James M. McCarthy, Vice-President of Price Brothers and Company, which occurred in Quebec on May 22nd. More recent graduates, particularly those of Commerce '24, will similarly hear with deep regret of the deaths of Gordon D. Hart, which occurred in Montreal on June 24th, and Charles W. Robertson, Director of the James Robertson Company, Limited, which occurred in the Ross Memorial Pavilion, Royal Victoria Hospital, Montreal, on the morning of July 18th. Graduates in Agriculture, 1923, were shocked in June to hear of the death, at Metis Beach, P.Q., of Kenneth M. Burke, who was shot and killed by a madman. Some impression of the unique position which the murdered man held in the regard of the community where he lived is shown by the fact that, only an hour before his untimely death, he had been elected mayor of the village.

Births

BALLON—In Montreal, on May 25th, to Dr. David H. Ballon, Arts '08, Med. '09, and Mrs. Ballon, a daughter.

BATSHAW—In Montreal, on May 25th, to Harry Batshaw, Law '24, and Dr. Anne Tarshis Batshaw, Med. '21, a daughter.

BRAIS—In Montreal, on June 4th, to Philippe Brais, Law '16, and Mrs. Brais, a daughter.

BURLAND—In Montreal, on June 13th, to B. R. Burland, Sci. '25, and Mrs. Burland, a son.

CALDWELL—In Detroit, Michigan, on August 13th, to Dr. J. Ewart Caldwell, Med. '24, and Mrs. Caldwell, a daughter.

DAVIDSON—In Montreal, on May 27th, to Gerald H. Davidson, past student, and Mrs. Davidson, a son.

DICKINSON—At Trail, B.C., on May 20th, to A. G. Dickinson, Sci. '23, and Mrs. Dickinson, a daughter.

ELLS—In Edmonton, Alberta, on July 15th, to S. C. Ells, Arts '00, Sci. '08, and Mrs. Ells, of Ottawa, a daughter.

GIBBS—In Montreal, on May 26th, to William G. Gibbs, past student, and Mrs. Gibbs, a son.

GOLT—In Montreal, on June 2nd, to Dr. M. Golt, Arts '19, Med. '22, and Mrs. Golt, a son.

HALPERIN—In Montreal, on July 19th, to Dr. H. M. Halperin, Dent. '17, and Mrs. Halperin, a son.

HODGE—In Montreal, on June 16th, to Dr. George E. Hodge, Med. '15, and Mrs. Hodge, a daughter.

HUTCHISON—In Montreal, on May 23rd, to Ross R. Hutchison, Com. '15, and Mrs. Hutchison, a son.

HYNDMAN—At Sherbrooke, Que., on June 3rd, to E. D. Hyndman, Sci. '21, and Mrs. Hyndman, a son.

LINDSAY—In Montreal, on June 14th, to the Rev. S. B. Lindsay, Arts '08, and Mrs. Lindsay, a daughter.

LOWRY—In Montreal, on May 16th, to Dr. J. K. Lowry, Dent. '25, and Mrs. Lowry, a daughter.

MARLER—In Montreal, on July 14th, to George C. Marler, Law '22, and Mrs. Marler, a daughter.

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McCall—In Montreal, on June 24th, to Alan D. McCall, Sci. '24, and Mrs. McCall, a son.

Patton—At Lakeside, P.Q., on July 18th, 1930, to Donald R. Patton, Com. '25, and Mrs. Patton (Violet A. Kayser), Arts '26, a son.

Rutherford—In Montreal, on June 11th, to J. Bulmer Rutherford, Arts '21, and Mrs. Rutherford, a daughter.

Ryan—In Ottawa, on May 13th, to Donald D. Ryan, Law '21, and Mrs. Ryan, a daughter.

Shulman—In Montreal, on May 20th, to S. A. Shulman, Law '21, and Mrs. Shulman, a son.

Steeves—In Montreal, on June 2nd, to B. H. Steeves, Sci.'23 and Mrs. Steeves (Phyllis Baker, Arts '29), a daughter.

Taylor—In Toronto, on July 29th, to E. P. Taylor, Sci. '22, and Mrs. Taylor, a daughter.

Timmins—In Montreal, on May 16th, to J. R. Timmins, past student, and Mrs. Timmins, a son.

Wickenden—In Montreal, on July 19th, to John F. Wickenden, Sci. '20, and Mrs. Wickenden, Three Rivers, Que., a daughter.

Wisse—In Montreal, on June 20th, to Dr. W. H. Wisse, Dent. '19, and Mrs. Wisse, a son, premature.

* * *

Marriages

Abbott—In Montreal on June 11th, Miss Leila Grace Roper and Arthur Caldwell Abbott, Sci. '25, both of Montreal.

Aikman-Read—In Sherbrooke, Que., on June 27th, Miss Mary Gwendolen Read, M.A. '25, and Cecil Howard Aikman, M.A., Arts '25, of Kenogami, Que.

Blain—On July 19th, in Montreal, Miss Sada Berry and Dr. James George Blain, Med. '24, of Sault Ste. Marie, Michigan.

Brierley-MacLean—At Souris, P.E.I., on August 28th, 1930, Miss Mary Winifred MacLean, Arts '26, and James Gossage Brierley, Arts '26, Law '29.

Calder—At Lachute, Que., on July 16th, Miss Lillian Florence Viola Hamilton and James Carswell Calder, Arts '24, of Montreal.

Carson—In Montreal, on June 25th, Miss Isabelle Ross and Dr. James Rae Carson, Dent. '27, both of Montreal.

Cayford—At Magog, Que., on July 5th, Miss Frances Jean Hall and Dr. Elmer Howard Cayford, Med. '26, of Montreal.

Dawes—In Montreal, on June 5th, Miss Jean Wilbur Cassils and Ormiston James Dawes, past student, both of Montreal.

Dunton—In Montreal on June 18th, Miss Elise Warden Dunton, Arts '25, daughter of the late Robert A. Dunton, Law '88, and of Mrs. Dunton, to Dr. Charles Duncan Thompson Mundell, all of Montreal.

Fortune—In Indianapolis, Ind., on May 15th, Miss Lou Ella Johnson and Robert V. Fortune, Arts '25, both of Indianapolis.

Fry—In Montreal, in June, Miss Helen Claire Hoyt and Arthur Wentworth Fry, past student, both of Montreal.

Fulton-Nichols—At Ste. Therèse, Que., on July 24th, Miss Iris Allo Nichols, B.H.S. '27, and Fowler Fraser Fulton, Sci. '28, both of Montreal.

Garneau—In Paris, France, on July 11th, Miss Elsie M. Creighton, and Léon Carneau, K.C., Law '00, of Montreal.

Graham-Mills—In Montreal on July 22nd, Miss Gladys Alexandra Mills, Arts '21 and Dr. Howard Carson Graham, Med. '24, of North Vancouver, B.C.

Harkom—In Montreal on June 3rd, Miss Margaret Stuart Prain and John Frederick Harkom, Sci. '14, of Ottawa.

Herzberg—In June, Miss Obelyn Blanchette and Otto Wilfrid Herzberg, Arts '17, of Montreal.

Hewson—At Allerton, Mass., on July 16th, Miss Doris Marie Alves and Charles Gerald Hewson, Arts '26, of Montreal.

King—In Toronto, on May 31st, Miss Lillian Dorothy Neville, of Norfolk, England, and Dr. Louis Vessot King, Arts '05, Professor of Physics at McGill University.

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KIRK—At Gananoque, Ont., on June 2nd, Miss Edna May Roderick and Dr. Claude Murray Kirk, Med. '26, of Montreal.

LAKE—In Brooklyn, N.Y., on March 8th, Miss Edna Beatrice Walker and Norman John Lake, past student, Toronto.

LEECH—In Montreal, on June 12th, Miss Elsie Mary Steele and Dr. Beverley Charles Leech, Med. '25, both of Montreal.

LLOYD—On June 26th, in Montreal, Miss Marjory Twyner, and Francis Ernest Llewellyn Lloyd, Arts '29, both of Montreal.

MACLEAN—In Montreal on May 19th, Miss Caroline Davis, and Dr. Basil Clarendon MacLean, Med. '25, of New Orleans, La.

MACVICAR-ROBERTS—In Toronto, on July 3rd, Miss Margaret Prys Roberts, Arts '25, and Rev. Donald Hugh MacVicar, M.A., B.D., Arts '25, Theol. '29.

MALONE—In Montreal, on June 26th, Miss Irene Catherine McDonald and Michael Patrick Malone, Sci. '24, both of Montreal.

MATHEWSON—In Montreal, on June 14th, Miss Dorothy Pincott and Samuel James Mathewson, Jr., Sci. '15, both of Montreal.

MCGERRIGLE—On August 1st, at Montreal, Miss F. Beatrice Adams and Rev. Clarence John McGerrigle, Arts '24, of Montreal.

MILLER—In Worcester, Mass., recently, Miss M. Isabel Miller, past student, and Charles F. Pharaoh, of Riverside, California.

NASH—In Victoria, B.C., on June 27th, Miss Athalie Gibson, and Dr. Arthur B. Nash, Med. '26, both of Victoria.

NELLIGAN—In Montreal, on June 18th, Miss May Margaret Ronald and Dr. Lawrence Patrick Nelligan, Med. '26, both of Montreal.

NOTKIN—In London, England, on May 26th, Miss Anne Sybil Lerner and Dr. Louis J. Notkin, Med. '20, of Montreal.

OXLEY—At St. Lambert, Que., on June 30th, Miss Hilda Mary Elizabeth Webster and Kiel Heseltine Oxley, Arts '27, both of St. Lambert.

ROSS—In Westmount, P.Q., on July 31st, Miss Edna Gladys Davison and Dr. Hugh Graham Ross, Med. '24.

ROSS—At. Beaconsfield, Que., on July 29th, Miss Jean Lesley Drummond and Dr. Stanley Graham Ross, Arts '10, Med. '13, both of Montreal.

SANDERSON—In New Rochelle, N.Y., on June 28th, Miss Margaret Dunn Hepburn, Porto Rico, and Matthew Telford Sanderson, past student.

SHEARWOOD—At Manaton, Devon, on May 12th, Miss Grace E. Shearwood, Mus. '23, and Charles F. Furse, both of Montreal.

SHEPHERD—In Toronto on May 31st, Miss Dorothy Ann McEnany and John Shepherd, Arts '27, of Montreal.

SILVER—In Westmount, P.Q., on June 17th, Miss Mary Edith Moore and Ralph Charles Silver, B.Sc. '27, M.Sc. '29, of Ottawa.

SPERBER—In Montreal on June 19th, Miss Etta Valerie Sherwin, of Chicago, and Lionel Albert Sperber, Arts '21, Law '24, of Montreal.

SPRATT—In Regina, Saskatchewan, on June 3rd, Miss Beryl Morrow and Maynard J. Spratt, Sci. '22.

TERROUX-PINHEY—In Cambridge, England, on July 5th, Kathleen Godwin Pinhey, Arts '21, and Fernand Richard Terroux, B.Sc. '25, M.Sc. '26.

TOMBS—At Englewood, N.J., on June 14th, Miss Mary Adelaide Blake and Laurence Chalmers Tombs, Arts '24, of the Secretariat of the League of Nations, Geneva, Switzerland.

WARMINGTON—In Montreal, on July 4th, Miss Dorothy Warmington, past student, Milwaukee, Wis., and Grant Webster, of New Hampshire.

WHITEHEAD—In Montreal on July 12th, Miss Jean Rider Crombie and Dr. Wallace Irwin Whitehead, Dent. '29, both of Montreal.

WOODRUFF-MULLIGAN—In Montreal on June 18th, Miss Helen Mulligan, Arts '27, daughter of Dr. E. A. Mulligan, Med. '90, and Mrs. Mulligan, Maniwaki, Que., and Dr. Richard S. Woodruff, Med. '28, of Montreal.

WORDEN—In Montreal, Miss Jean Worden, Arts '28, and Christopher Evelyn Ellis.

YOUNGER—On August 23rd, at the Island of Orleans, Que., Miss Piercy Porteous and George Robert Younger, Law '21, both of Montreal.

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A Special Convocation

IN MOYSE HALL, on August 13th, the University bestowed honorary LL.D. degrees upon Sir John Simon, G.C.S.I., K.C.V.O., O.B.E., K.C., noted British statesman; Lord Hugh Pattison Macmillan, K.C., Lord Advocate of Scotland; the Right Honourable Sir Frank Boyd Merriman, K.C., M.P., former Solicitor-General for His Majesty's Government in Great Britain; and Maître Henri Decugis, one of the most prominent lawyers of France.

Arriving in Montreal, the distinguished guests were escorted direct to Moyse Hall, where they were received by the Chancellor, the Principal, and many of the University Staff. The ceremony of conferring the degrees followed promptly, Sir John Simon, the first to be honoured, being presented by Dean Percy E. Corbett, as the one-time British Secretary of State for Foreign Affairs, leader of the English Bar, and one of England's most prominent jurists. Replying, Sir John stated that McGill's Law School was known and admired in England through the work of many graduates, notable among whom were the late Eugène Lafleur and Aimé Geoffrion, K.C., who was present as Sir John paid his courteous tribute.

Mr. Justice Howard then presented Lord Macmillan, a distinguished jurist of Scotland, whose name would always be associated with scientific and parliamentary law and with the development of high parliamentary practice. In his speech in reply, Lord Macmillan stated that McGill had never been a provincial university in the derogatory sense of the word, but represented rather an institution which sought to further inter-Empire University bonds, in the same manner that London University, whose Reconstitutional Board he had recently joined, sought means of becoming and holding place as a great Imperial college.

Sir Frank Merriman was then presented for his degree by Dr. A. J. Brown, who stated that the candidate was a great lawyer and a distinguished Member of the British House of Parliament. Upon receipt of the degree, Sir Frank expressed his warm appreciation of the honour, remarking that McGill was faced with the task of teaching the two great law systems of the world, a task which, as was known in Europe, was being remarkably well carried out. Sir Frank added that McGill's degree was the first he had ever received from a university and that, for the honour done him, he would never cease to be grateful.

Following the presentation of the three noted jurists from the British Isles, Mr. Justice Surveyer presented Maître Henri Decugis, one of France's greatest legal minds and the leading exponent of English law in the Republic. Replying, Maître Decugis described McGill as a true "foyer intellectuel", playing a notable part and contributing to civilization in science, arts, and

law. He expressed the hope that an alliance between McGill and the University of Paris might soon be effected.

* * *

Dustings from the East Wing Cellar

(*Continued from page 19*)

he revelled in this genre, for a little later he again comments upon the McGill Faculty: "They will be far more anxiously exercised about the quantities rather than the qualities of those they will let loose to prey on the public."

The McGill reply to this was gentlemanly but skilful, for the abuse was attributed to natural and almost pardonable envy. Perhaps as a corrective to these militant instructors the University decreed in a calendar four years later: "Every student is expected to present, on his entrance, a written intimation from his parent, or guardian, of the name of the minister of religion under whose care and instruction it is desired that the student shall be placed."

Intriguing details from early calendars and annual reports invite me to ramble on, but those bundles were heavy and tiring, and I will borrow my conclusion from an Annual Report of the Hon. Charles Dewey Day, LL.D., President and Chancellor of the University from 1857 to 1884, whose grave was recently found by Dr. J. P. Day in the churchyard at Dawlish in Devonshire. "On the whole we have to express our gratitude to God," wrote Dr. Day the First in 1876, "for our exemption from any serious loss or calamity during the year, for the good conduct and progress of our students, and for the kindness and aid we have experienced in the prosecution of our work. If we have any cause for sorrow it is in the inadequacy of the means at our disposal to meet as fully as we could wish the growing educational wants of this country, which are undoubtedly making demands upon us which would require increased means and a more numerous staff." On the whole, I hope, these wants are being met.

* * *

The Graduates' Club of Montreal has recently moved into its Club House at 1808 Sherbrooke Street West. Formed last year, this new club for University graduates numbers among its membership representatives from the leading Canadian universities, as well as many from the United States and other foreign countries. Officers for the current year include: R. E. Jamieson, McGill '14, *President*, A. Stalker, McGill '12, *Vice-president*, A. L. Fyon, McGill '16, *Hon. Sec.*, and W. E. Dunton, McGill '16, *Hon. Treas.*

* * *

SCIENCE '14. R. E. Jamieson, *Secretary*

Science '14 will hold its regular annual dinner on Saturday, November first, next, at 7.00 P.M., at the Faculty Club, 3600 University Street, Montreal. R. E. Jamieson, Associate Professor of Civil Engineering, is the Secretary.

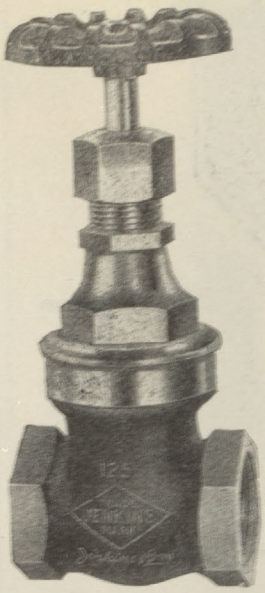


Fig. 300

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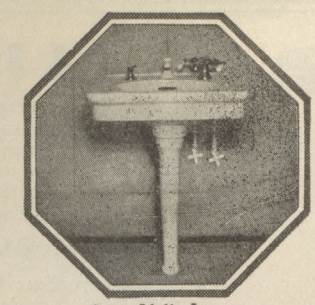
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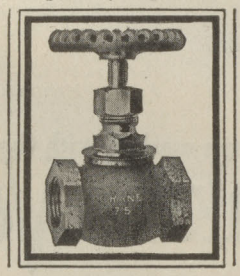
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Alumnæ Notes

1920—Doris Barnes is on leave from her teaching post at Nashua, N.H., to complete work for her M.A. degree at Boston University.

1921—Mrs. F. R. Terroux (Kathleen Godwin) received her Ph.D. degree from McGill at the spring convocation.

1927—Maud Martin has become Head Librarian at the Royal Bank of Canada, Head Office. Pauline Morrison is Economist in the office of the Board of Trade, Montreal, and Marguerite Benny, Librarian of Canadian Industries, Limited, Montreal, has been elected President of the McGill University Library School Alumni Society.

1929—Ruth E. Moore has been awarded the Edward Austin Fellowship in Classics for graduate study, and Rachel Chait the Sarah Sherburne Langdon Haven Scholarship in English at Radcliffe College.

Margaret Gillies is on the laboratory staff of the Royal Victoria Hospital, and Nora Home, Comm. '29, is assistant to the Chief Clerk of the Town of Cranbrook, B.C.

Marjorie Bradley will be principal of the Megantic High School, Megantic, P.Q., for the ensuing session.

Ada Fanjoy, B.H.S. '29, has left the Royal Victoria Hospital, and returned to Nova Scotia to take a position, and Norah Longworth has returned to Charlottetown, P.E.I., for the summer, and will spend the winter travelling.

Madeleine L. Girvan is in the Investment Department of the Sun Life Assurance Company, Montreal, and Gwen Roberts has returned to McGill on the resident staff of the Royal Victoria College and will take her M.A. in History.

1930—Florence Liang is taking the librarian course at Columbia University, preparatory to returning to China to fill a position in the Peking Library.

Ruth Tomlinson is doing laboratory work at the Elmhurst Dairies, Montreal West.

Alice Prowse has been temporarily employed with the Sun Life Assurance Company during the summer, and sails in September to spend the winter in Paris.

Isobel Rowat will return to McGill to take her M.A. in French, and Dorothy J. Ross, to take her's in History.

Eleanor O'Halloran is taking a business course in Montreal this winter.

Several members of the class have accepted positions on the teaching staff of the city schools: Amy Collie at Maisonneuve, Marjories Mitchell at Peace Centennial, Mollie Flanz at Bancroft, and Marjorie Crichton at Rosemount.

Margaret Robertson is teaching at Miss. Robertson's School, Phyllis Brooks is taking a French secretarial course in Montreal, and Beatrice Ferneyhough expects to study journalism this winter in the United States.

* * *

Personals

(*continued from page 25*)

Felix H. Walter, M.A., Arts '23, has left the staff of Queen's University, Kingston, to be associate professor of French at Trinity University, Toronto.

Colonel H. M. Jacques, D.S.O., Med. '94, has retired on pension from the Royal Canadian Army Medical Corps, retaining his rank, and has given up the position of Director-General of Medical Services at Ottawa.

Dr. Alton Goldbloom, Arts '13, Med. '16, of Montreal, attended the second International Pædiatric Congress held in Stockholm in August.

W. M. Couper, Law '02, of Montreal, has been re-elected High Chief Ranger of the Canadian Order of Foresters.

W. J. Messenger, M.A., Arts '92, has retired from the service of the Protestant Board of School Commissioners, Montreal. He has been principal of the Victoria School, Montreal, for the past 22 years and was previously on the staffs of St. Francis College, Richmond, Que., and the Gault Institute, Valleyfield, Que.

Mortimer Mordecai Zlotnik, Arts '30, spent the summer as a chalutz (tiller of the soil) in Palestine and will work in the Department of Oriental Studies at the Hebrew University, Jerusalem, this winter. During his college term, he was president of the Oriental Club at McGill.

The Reverend N. A. F. Bourne, Arts '87, who established the Church of the Nativity, Toronto, in 1923, has now retired from its rectorship and from the active ministry of the Church of England in Canada.

Lt.-Col. C. A. Young, Med. '05, of Ottawa, has been elected president of the Association of Military Medical Officers of Canada.

Hon. W. L. Bond, Arts '94, Law '97, has been appointed to succeed the late Eugene Lafleur, K.C., Arts '77, Law '80, as a member of the Protestant Committee of Education.

Dr. Winston C. Bushell, Dent. '24, of Montreal, gave a clinic before members of the Vermont State Dental Society at Burlington, Vt., in May.

Miss Anna M. MacKeen, Arts '08, who has been in charge of the Graduate House at Simmons College, Boston, Mass., for the past five years, has been appointed Warden of Shirreff Hall, Dalhousie University, Halifax, N.S.

Henry G. Donald, M.A., Arts '29, and Wilfrid Gallay, Ph.D., Arts '27, have been awarded the Moyse Travelling Scholarships for 1930. The former will study in London and at the Sorbonne, and the latter in England and Germany.

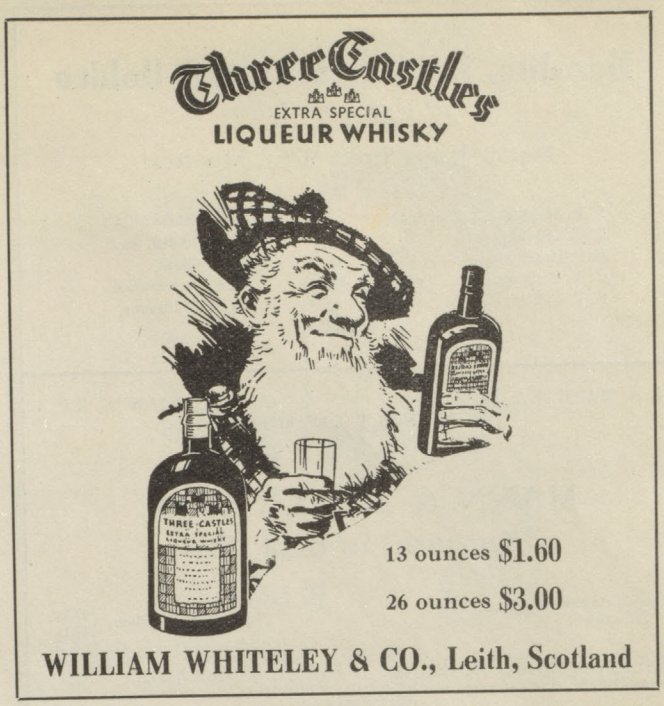
Notes

(*Continued from page 22*)

In welcoming to Canada officers and officials of the British Airship R-100, on August 4th, George S. Currie, Arts '11, President of the Montreal Canadian Club, said, in part, "Our old River St. Lawrence, along whose shores our history has been made, received another thrill with the arrival of the R-100." Replying, Wing-Commander Colmore stated that, with the exception of fifteen minutes, when near the city of Three Rivers, Quebec, the voyage of the R-100 had been more monotonous and actually less eventful than an ordinary crossing of the ocean by sea.

Among the successful candidates in the recent Dominion election were L. W. Jacobs, K.C., Law '93 (Liberal), in the Cartier division of Montreal; J. T. Hackett, K.C., Law '09 (Conservative), in Stanstead, Quebec; Dr. J. C. Moore, Vet. '97, Med. '01 (Conservative), in Chateauguay-Huntingdon, Quebec; and Dr. M. J. Maloney, Med. '97 (Conservative), in South Renfrew, Ontario.

Recent honours to members of the staff of the Faculty of Medicine of McGill University include the election of Dr. David W. Mackenzie, Clinical Professor of Urology, and Head of the Genito-Urinary Department of the Royal Victoria Hospital, Montreal, as President of the Genito-Urinary Association of America.



Early in June, only a few days after the last issue of the *News* went to press, it was announced that the Governors of the University had received, and would accept with regret, the resignation of Dr. F. C. Harrison, Professor of Bacteriology and Dean of the Faculty of Graduate Studies and Research. As Principal of Macdonald College and in many other spheres of academic work, Dr. Harrison has rendered services which will place his name on the permanent list of those to whom the University owes its standing and position.

More than one hundred medical librarians from Canada and the United States attended the annual meeting of the Medical Library Association held in the McGill Medical Building in June. Dr. T. Archibald Malloch, Med. '13, is President of the Association. During their visit to Montreal many delegates to the convention visited and inspected the Osler Library, the unique features of which were explained to them by Dr. W. W. Francis, Med. '09, Osler Librarian.

Among the resignations accepted by the Governors of McGill in June was that of Dr. J. A. Nicholson, for 28 years and 4 months University Registrar. Referring to Dr. Nicholson's retirement, Sir Arthur Currie said, in part, "He will be remembered with grateful affection for his devoted eagerness on behalf of the University and for his untiring efforts on behalf of education in City, Province, and Dominion." Many thousands of McGill men and women will warmly echo the Principal's words of commendation.

Following a meeting of the Board of Governors of the University in June, it was announced that fees in the Faculties of Arts, Commerce, and Music would be increased by $25 forthwith. On the basis of last year's registration, it is believed that the new policy will augment the University's income by approximately $30,000. Notwithstanding the increase, the fees at McGill will remain appreciably lower than in corresponding universities in the United States.

In addresses delivered in June, Dr. W. B. Howell, of the Faculty of Medicine, and Professor R. de L. French, of the Faculty of Applied Science, drew attention to the inability of many graduates to speak and write English with the fluency and grammatical accuracy that is so highly to be desired. Both speakers were of the opinion that greater command of English, and a far higher degree of accuracy in its use, would be of greater value to graduates than the student, while a stu-

(*Continued on page 39*)

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Notes

(*Continued from page 37*)

dent, is willing to believe. Few students, it was claimed, recognize the power which ability to express their thoughts clearly, fluently, and in grammatical English, must always bestow.

According to an announcement made in August, the University will offer a course in debating and public speaking this autumn, under the direction of J. A. EDMISON, B.A., formerly of Queen's University and now President of the McGill Debating Union Society. The course will be given under the auspices of the Department of Extra-Mural Relations.

C. W. STOKES, Sci. '03, Secretary of the Chicago Branch of the Graduates' Society, reports that at a luncheon in the Union League Club on June 23rd, DEAN P. E. CORBETT, of the Faculty of Law, was present as a guest and was able to give the members of the Branch news of McGill that was most deeply appreciated.

An appointment of unusual interest was announced by the Governors of the University in June, namely that of DR. KIANG KANG-HU as Head of the Department of Chinese Studies. Dr. Kiang Kang-hu, one of the foremost living Chinese scholars, received his modern education in Japan, Belgium, and the United States. He was at one time a professor in the Peking Imperial University and was later head of a university in Nanking. In 1911, he joined the staff of the University of California and later took charge of the Oriental Collection in the Library of Congress, Washington, D.C. He is the author of eighteen books in Chinese and several in English, the best known of the latter, perhaps, being *The Jade Mountain*, a collection of Chinese poems, translated in collaboration with Mr. Witter Bynner.

On Dominion Day, July 1st, Radio Station JOAK, Tokio, Japan, and local stations in Osaka, Nagoya, Hirshima, Kunamoto, and Senbai, also a station in Seoul, Korea, broadcasted a speech by the Canadian Minister to Japan, the HONOURABLE HERBERT MARLER, Law '98. The speech, made in English, was translated by a member of the Legation staff. Mr. Marler's work in Japan is proving of deep interest and some account of it, or of details connected with it, will appear, Mr. Marler has promised, in a future issue of the *News*.

Late in June a cable was received at McGill announcing that two "1851 Overseas Research Scholarships" had been awarded to graduates of McGill, the recipients being Drs. C. T. LANE, Sci. '25, M.Sc. '27, Ph. D. '29, and G. O. LANGSTROTH, Ph.D. '30, each of whom holds a Ph.D. degree in mathematics and physics. Dr. Lane will continue his research work in Munich, Germany, and Dr. Langstroth will continue studies in spectroscopy at the University of London, England.

Scholarships announced by the Government of the Province of Quebec in August included awards as a result of which H. F. MOSELEY, Arts '26, and J. T. HENDERSON, B.Sc. '27, M.Sc. '28, will continue their studies abroad. Mr. Moseley is a Rhodes Scholar at Oxford, and Mr. Henderson is working in London, under Dr. E. V. Appleton, F.R.S., on problems in atmospheric electricity. HARRY GRUNDY, Law '30, winner of the Quebec Bar Association Prize for Civil Procedure, will also study abroad with a Government of the Province of Quebec Scholarship.

The Montreal General Hospital announced in August a gift of $50,000 from John C. Newman, Esq., of Montreal, the money to be used for the purchase of radium. This gift is additional to a similar amount presented by Mr. Newman to the Hospital for the same purpose last March. Both gifts are governed solely by the condition that the radium shall be available without charge to patients unable to pay the usual fees.



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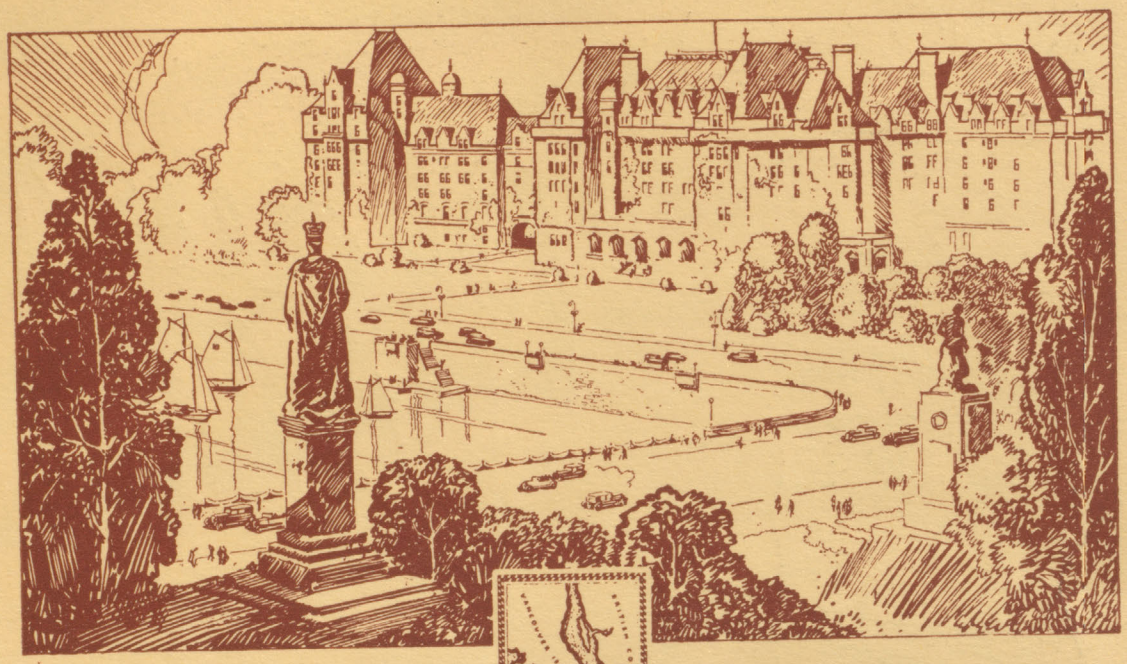
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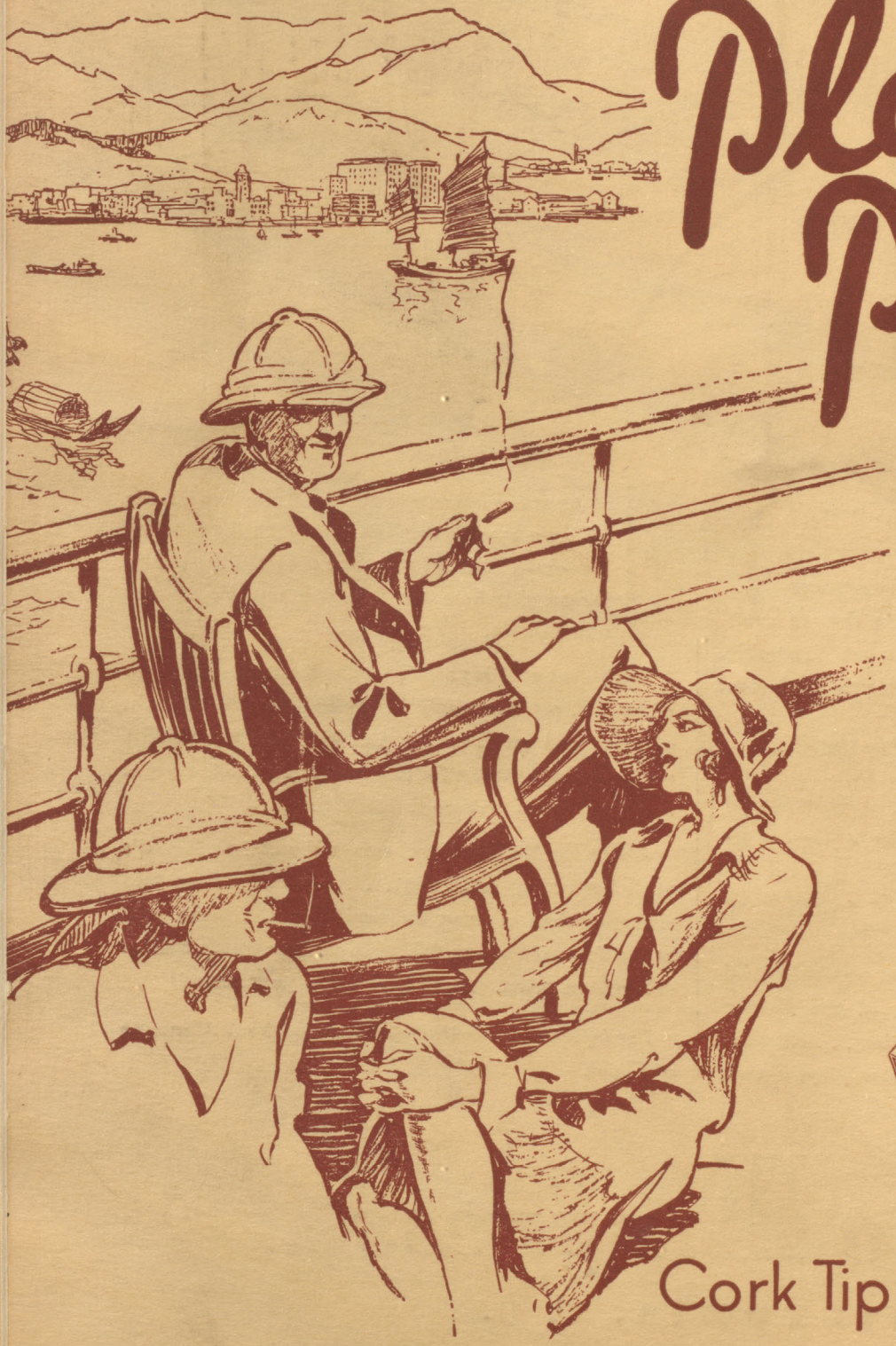
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